

SCAG[®]

POWER EQUIPMENT

MODEL SW



THIS MANUAL CONTAINS THE OPERATING INSTRUCTIONS AND SAFETY INFORMATION FOR YOUR SCAG MOWER. READING THIS MANUAL CAN PROVIDE YOU WITH ASSISTANCE IN MAINTENANCE AND ADJUSTMENT PROCEDURES TO KEEP YOUR MOWER PERFORMING TO MAXIMUM EFFICIENCY. THE SPECIFIC MODELS THAT THIS BOOK COVERS ARE CONTAINED ON THE INSIDE COVER. BEFORE OPERATING YOUR MACHINE, PLEASE READ ALL THE INFORMATION ENCLOSED.

OPERATOR'S MANUAL



WARNING:

FAILURE TO FOLLOW SAFE OPERATING PRACTICES MAY RESULT IN SERIOUS INJURY.

- * Keep all shields in place, especially the grass discharge chute.
- * Before performing any maintenance or service, stop the machine and remove the spark plug wire and ignition key.
- * If a mechanism becomes clogged, stop the engine before cleaning.
- * Keep hands, feet and clothing away from power-driven parts.
- * Read this manual completely as well as other manuals that came with your mower.
- * Keep others off the tractor (only one person at a time)

REMEMBER - YOUR MOWER IS ONLY AS SAFE AS THE OPERATOR!

Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of the personnel involved in the operation, transport, maintenance, and storage of the equipment.

This manual covers the operating instructions
and illustrated parts list for:

SW32-13KA	with a serial number of 8000001 to 8009999
SW36A-13KA	with a serial number of 8010001 to 8019999
SW36A-13KH	with a serial number of 8020001 to 8029999
SW36A-15KA	with a serial number of 8030001 to 8039999
SW36A-15KH	with a serial number of 8050001 to 8059999
SW48A-15KA	with a serial number of 8060001 to 8069999
SW48A-15KH	with a serial number of 8070001 to 8079999
SW48A-17KA	with a serial number of 8080001 to 8089999
SW52A-17KA	with a serial number of 8090001 to 8099999
SW52A-18KH	with a serial number of 8100001 to 8109999

Always use the entire serial number listed on the serial number tag when referring to this product.

SCAG[®]

POWER EQUIPMENT

TABLE OF CONTENTS

MODEL SW

SUBJECT	PAGE
Introduction	1
General Safety Instructions	1
Signal Words	1
Symbols	2-3
Before Operating	4
While Operating	4
Maintenance and Storage	5
Initial Run-In Procedures	6
Mower Operation	6
Cutter Deck Belt Adjustments	7
Transmission Drive Belt	8
Drive Control Adjustments	8
Cutter Deck Adjustments	8
Blade Height Adjustments	9
Cutter Blades	9
Custom-Cut Baffle Adjustment	10
Lubrication and Maintenance Chart	11
Troubleshooting Cutting Conditions	12-14
Technical Specifications	15-16



TABLE OF CONTENTS

(CONTINUED)

SUBJECT	PAGE
Illustrated Parts List	
SWM-32", 36" Cutter Decks.....	17-18
SWM-48", 52" Cutter Decks.....	19-20
Caster Assembly.....	21
Engine Deck - 13KH, 15KH, 13KA, 15KA, 17KA.....	22-23
Engine Deck - 18KH.....	24-25
Handle Assembly.....	26-27
Instrument Panel.....	28
Peerless Transmission.....	29
Engine Deck Wire Harness.....	30
Handle Wire Harness.....	31
Wire Harness Adapter-Kawasaki (15HP & 17HP).....	31
Replacement Decals.....	32-33
Warranty Statement.....	Inside Back Cover

INTRODUCTION

Your mower was built to the highest standards in the industry. However, the prolonged life and maximum efficiency of your mower depends on you following the operating, maintenance and adjustment instructions in this manual.

We encourage you to contact your dealer for repairs. All Scag dealers are informed of the latest methods to service this equipment and provide prompt and efficient service in the field or at their service shop. They carry a full line of Scag service parts.

A replacement Operator's Manual is available from your Scag Servicing Dealer or by contacting Scag Power Equipment, Service Department at P.O. Box 152, Mayville, WI 53050. You may also contact us through our website at www.scag.com. Please indicate the complete model and serial number of your Scag product.

USE OF OTHER THAN ORIGINAL SCAG REPLACEMENT PARTS WILL VOID THE WARRANTY.

The "Right" and "Left", "Front" and "Rear" of the machine are referenced from the operator's perspective when in the normal operating position and facing the forward travel direction.

GENERAL SAFETY INSTRUCTIONS

READ THIS OPERATOR'S MANUAL and instructions furnished with attachments.

Perform only those maintenance procedures described in this manual. If major repairs are ever needed or assistance is desired, contact an Authorized Scag Dealer. To ensure optimum performance and safety, always purchase genuine SCAG replacement parts and accessories.

Your safety and the safety of others depends significantly upon your knowledge and understanding of all correct operating practices and procedures of this machine.

SIGNAL WORDS



This symbol means "**Attention! Become Alert! Your Safety is Involved!**". The symbol is used with the following signal words to attract your attention to safety messages found on the decals and throughout this manual. The message that follows the symbol contains important information about safety. To avoid injury and possible death, carefully read the message! Be sure to fully understand the causes of possible injury or death.

Signal Word:

It is a distinctive word on safety decals and throughout this manual that alerts the viewer to the existence and relative degree of the hazard.



The signal word "DANGER" denotes that an extremely hazardous situation exists on or near the machine that could result in high probability of death or irreparable injury if proper precautions are not taken.



The signal word "WARNING" denotes that a hazard exists on or near the machine that can result in injury or death if proper precautions are not taken.






















The signal word "CAUTION" is a reminder of safety practices on or near the machine that could result in personal injury if proper precautions are not taken.

ISO Symbols



CE Mark

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	Choke		Transmission
	Parking Brake		Spinning Blade
	On/Start		Spring Tension on Idler
	Off/Stop		Oil
<div>  <p>Falling Hazard</p> </div>			

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	Fast		Slow
	Continuously variable - Linear		Cutting element - Basic symbol
	Pinch Point		Cutting element - Engage
	Hourmeter/elapsed operating hours		Cutting element - Disengage
	Keep bystanders away		Read operator's manual

BEFORE OPERATING

1. Know the controls and how to stop quickly.
2. Do not allow children to operate the machine. Do not allow adults to operate the machine without proper instruction.
3. If the operator(s) or mechanic(s) can not read English it is the owner's responsibility to explain this material to them.
4. Remove all debris or other objects that might be picked up and thrown by the cutter blades. Keep all bystanders away from the mowing area.
5. Keep all shields, safety devices, and decals in place. If a shield, safety device or decal is defective or damaged, repair or replace it before operating. Also, check all nuts, bolts and screws for proper tightness, to assure the machine is in safe operating condition.
6. Do not operate the machine while wearing sandals, tennis shoes, sneakers or shorts. Also, do not wear loose fitting clothing which could get caught in moving parts. Always wear long pants and substantial shoes. Wearing safety glasses and safety shoes is advisable and required by some local ordinances and insurance regulations.
7. The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people or property.
8. Fill the fuel tank with clean, fresh gasoline, with a minimum octane rating of 87. Avoid spilling gasoline. Gasoline is highly flammable, handle it carefully.
 - A. Use an approved gasoline container.
 - B. Do not fill the tank while the engine is hot or running.
 - C. Do not smoke while handling gasoline.
 - D. Fill the fuel tank outdoors and up to approximately 1" (25 mm) below the bottom of the filler neck.
 - E. Wipe up any spilled gasoline.

9. Before attempting to start the engine, shift the transmission into neutral, move the blade engagement switch to the OFF position, and move the neutral latches to neutral.

WHILE OPERATING

1. Do not operate the machine under the influence of alcohol or drugs.
2. Start the engine when the neutral latches are in the neutral lock position, the cutter blades are disengaged, and the transmission is in neutral.
3. Do not run the engine in a confined area without adequate ventilation. Exhaust fumes are hazardous and could possibly be deadly.
4. Using the machine demands attention. To prevent loss of control:
 - A. Mow only in daylight or when there is good artificial light.
 - B. Watch for holes or other hidden hazards.
 - C. Do not drive close to a drop-off, ditch, creek bank, or other hazard.
 - D. Reduce speed when making sharp turns and when turning on hillsides.
 - E. Always be sure of your footing. Keep a firm hold on the handles and walk---never run.
 - F. Do not operate where conditions are slippery.
5. The discharge chute must always be installed and in the down position on the side discharge cutter deck except when the Scag optional grass catcher or mulching plate are properly installed. If the discharge area should plug, shut the engine off and wait for all movement to stop before removing the obstruction.
6. Disengage the blades and wait for them to stop before crossing gravel drives, walks or roads.
7. Shut the engine off and wait until the blades come to a complete stop before removing the grass catcher container.
8. Never raise the cutter deck while the blades are rotating.

9. Always park the mower and/or start the engine on a level surface.
10. If the cutting blades should strike a solid object or the equipment should start to vibrate abnormally, stop the engine, disconnect the spark plug wire, and check immediately for the cause. Vibration is generally a warning of trouble. Check the machine for damaged or defective parts. Repair any damage before starting the engine or operating the cutter deck. Be sure the blades are in good condition and the blade bolts are tight.
11. Reduce speed and exercise extreme caution on slopes and in sharp turns to prevent tipping or loss of control. Be especially cautious when changing directions on slopes.
15. Use only Scag approved attachments and accessories.
 Scag Approved Attachments:
 GC-F4
 GC-4D
 Scag Approved Accessories:
 MulchMaster
 Adjust-A-Grip
 Turbo Baffle
 Cup Holder
 Using unapproved attachments, (especially "stand-up" riding attachments) may be hazardous.

MAINTENANCE AND STORAGE

1. Allow only trained personnel to service the machine.
1. Disconnect the spark plug wire from the spark plug to prevent accidental starting of the engine when servicing, adjusting or storing the machine.
2. If the mower must be tipped to perform maintenance or adjustment, remove the battery, drain the gasoline from the fuel tank and the oil from the crankcase.
3. To reduce potential fire hazard, keep the engine free of excessive grease, grass, leaves and accumulations of dirt.
4. Be sure the machine is in safe operating condition by keeping nuts, bolts, and screws tight. Check the blade mounting bolts and nuts frequently to be sure they are tight.
5. If the engine must be running to perform a maintenance adjustment, keep hands, feet, clothing and other parts of the body away from the cutter deck blades and other moving parts.
6. Do not overspeed the engine by changing governor settings. To be sure of safety and accuracy, have an authorized dealer check maximum engine speed with a tachometer.
7. The engine must be shut off before checking the oil or adding oil to the crankcase.



WARNING:

DO NOT operate on steep slopes. To check a slope, attempt to back up it (with the cutter deck down). If the machine can back up the slope without the wheels slipping, reduce speed and use extreme caution. ALWAYS FOLLOW OSHA APPROVED OPERATION.

12. Do not touch the engine or muffler while the engine is running or soon after it is stopped. These areas could be hot enough to cause a burn.
13. Before leaving the operator's position or leaving the mower unattended, shift the transmission into neutral, place the neutral latches in the neutral lock position, and move the blade engagement switch to OFF. Shut the engine OFF and remove the key.
14. Do not pass or stand on the grass discharge side of any mower with the engine running. Stop operation when another person approaches.



WARNING
FALLING HAZARD
USE ONLY SCAG APPROVED
RIDING ATTACHMENTS
SEE OPERATOR'S MANUAL 481109

8. Allow the engine to cool before storing the mower in any enclosure such as a garage or storage shed. Make sure the fuel tank is empty if the machine is to be stored in excess of 30 days. Do not store the mower near any open flame or where gasoline fumes may be ignited by a spark.
9. Always store gasoline in a safety-approved, red container.
10. Be careful when servicing the battery as it contains acid, which is corrosive and could cause burns to skin and clothing.
11. Batteries release explosive gases when being charged or discharged. Keep batteries away from any source of sparks and/or flame.

INITIAL RUN-IN PROCEDURES (FIRST DAY OF USE OR APPROXIMATELY 10 HOURS)

1. Check the belts for proper tension at 2, 4 and 8 hours. Adjust as needed.
2. Check the steering control rods for neutral adjustment. (See Adjustments, page 6)
3. Check the tires for proper pressure.

Caster Wheels	25 psi.
Drive Wheels	12 psi.
4. Check for loose hardware. Tighten as needed.
5. Check the safety switches for proper adjustment:
 - * The engine will crank, but not start if the machine is not in neutral.
 - * On electric start machines, the engine will not crank if the PTO switch is on.
 - * The engine should crank and start if the machine is in neutral and the PTO engagement switch is OFF.
6. Apply lubricant to all the grease fittings. Lubricant was applied at the factory. This is just a precautionary check to make sure that all the fittings have been lubricated.

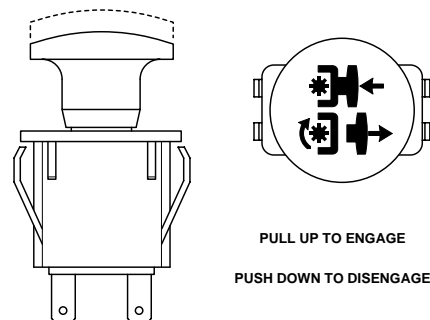
MOWER OPERATION

1. Read and understand the safety instructions before attempting to operate this machine.
2. Before starting the engine:
 - * Check the oil level in the engine.
 - * Fill the fuel tank with clean, fresh, lead-free gasoline.
 - * Open the fuel valve on the bottom of the fuel tank.

-NOTE-

Use gasoline with an octane rating no less than 87.

- * The transmission must be in NEUTRAL.
 - * The blade clutch switch must be in the OFF position.
 - * The operator's presence levers must be released.
 - * The neutral latches must be in the neutral lock position.
 - * The key switch must be on.
3. Start the engine:
 - * Choke as required. If the engine is cold, pull the choke knob out. When the engine starts, slowly push the choke in. If the engine stalls, repeat the above operation. When the engine is warm, choking may not be necessary.
 4. Engage the cutter blades by depressing the operator presence levers and pulling the blade clutch switch into the ON position. Push the switch to the OFF position to disengage the cutter blades.



390S0138

-NOTE-

When PTO is engaged or (possibly) disengaged, a squealing sound from the underside of the machine is normal. It is caused by the electric clutch plates meshing as the cutter blades come up to speed. For best equipment life, engage the clutch with the engine at 3/4 throttle, not under full load.



WARNING:

To avoid serious bodily injury and damage to the transmission, the machine must be at a full stop before shifting between gears or shifting between forward and reverse.

- Shift the transmission into gear for the desired mowing speed.

-NOTE-

Top speed is suggested only for transport!

- While squeezing the steering brake levers with both hands, release both neutral latches.
- When the steering brake levers are released, the machine will travel straight. To make a right turn, squeeze the RH lever. To turn left, squeeze the LH lever.
- TO STOP, squeeze both levers, lock the neutral latches, and shift the transmission into neutral.

CUTTER DECK BELT ADJUSTMENTS

- Remove the belt cover.
- Adjust the cutter deck drive belt using a belt tension gauge. Adjust the belt so that the belt moves 1/2" with 10 pounds of pressure. Adjust the tension by tightening or loosening the J-bolt nut. (See figure 1)

-NOTE-

Due to initial belt stretch and to prevent the belt from slipping, check this adjustment after the first 2 hours, 4 hours and 8 hours of operation.

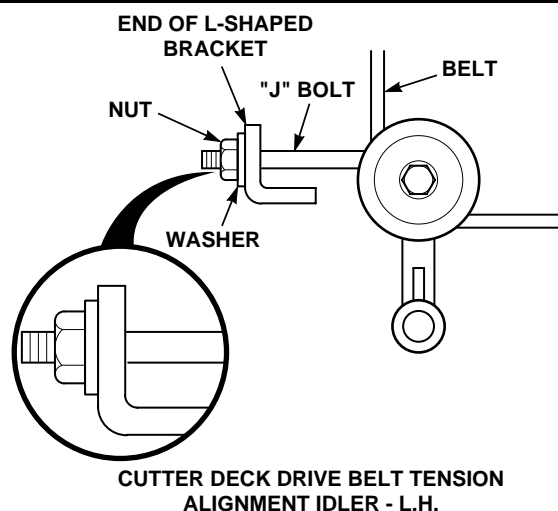


Figure 1

- Adjust the RH blade drive belt using a belt tension gauge. Adjust the belt so that the belt moves 1/2" with 10 pounds of pressure. Adjust the tension by tightening or loosening the J-bolt nut. (See Figure 2 & 3)

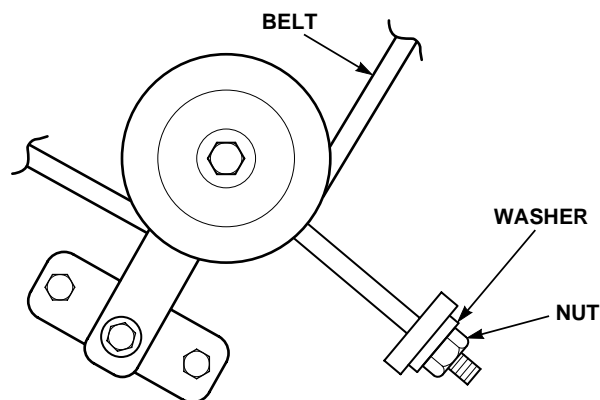


Figure 2. RH Blade Belt Adjustment

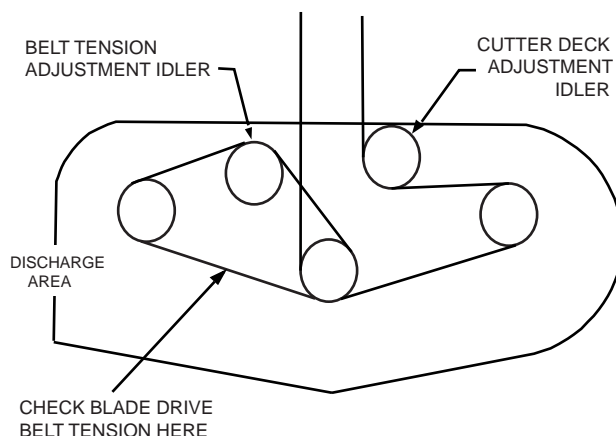


Figure 3. Cutter Deck Belts

SC402G

TRANSMISSION DRIVE BELT

Adjust the transmission drive belt so that there is about a 3/16" deflection with 10 lbs. of pressure. Adjust by loosening idler pulley mounting bolt and sliding the idler left or right to change belt tension.

DRIVE CONTROL ADJUSTMENTS

1. Adjust the steering control rods so that there is approximately 3/4" clearance from the bottom of the rod to the bottom of the neutral latch slot when in the drive position. (See Figure 4)

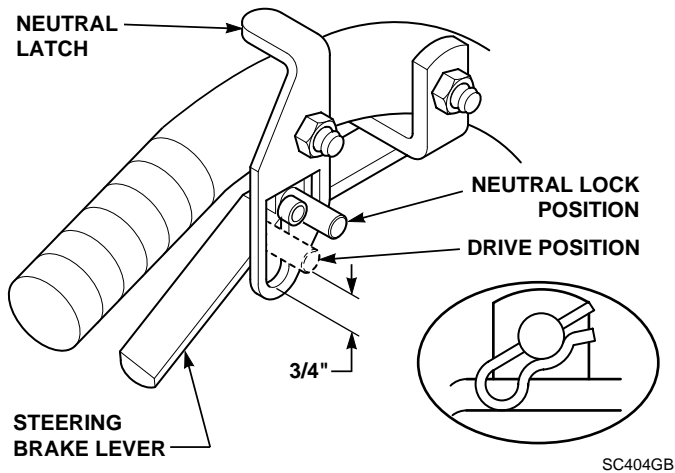


Figure 4. Steering Control Rod Adjustment

2. Adjust the steering brake rods so that the brakes do not apply until the steering levers are pulled tight to the handles. When the steering levers are locked in the neutral position the machine should move freely.

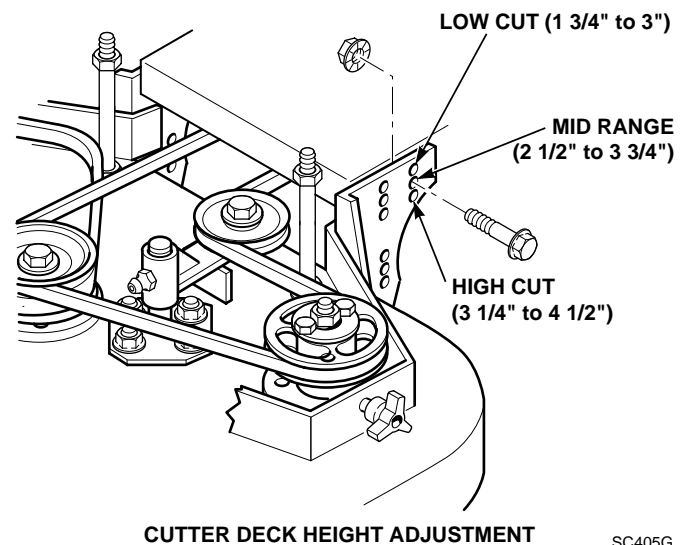
CUTTER DECK ADJUSTMENTS

Due to the many cutting conditions that exist, it is difficult to suggest a cutter deck setting that will work for every lawn. There are two adjustments that can be made on these decks, pitch and height.

PITCH is the angle of the blades (comparing front to rear). A 1/4" downward pitch (front of deck down) is recommended for best cutting performance.

HEIGHT is the nominal distance the blade is off of the ground. This measurement is made with the blades pointed side to side and distance is measured between cutting tip and ground. (Also see Blade Height Adjustment, next page)

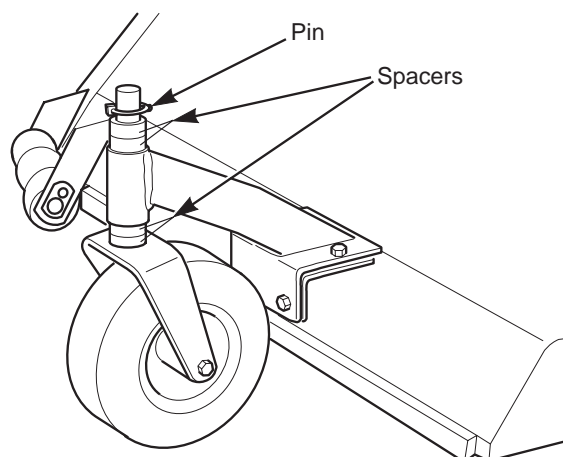
Changes to the cutting height can be achieved by repositioning the cutter deck. (This adjustment will also effect the pitch of the deck.) There are three available positions (see Figure 5).



CUTTER DECK HEIGHT ADJUSTMENT

Figure 5. Cutting Height Adjustment

Caster spacers also can be repositioned to change cutting heights and to change the pitch of the deck. (See Figure 6)



2003SGB005

Figure 6. Caster Wheel Spacers

BLADE HEIGHT ADJUSTMENT

Adjusting the blade height can be done by moving any number of the five smaller 1/4" spacers on the blade mounting bolts to the top of the spindle shaft or below the spindle shaft.

-NOTE-

All blades should be positioned equally.

For best cut and discharge, a minimum of three spacers should be installed between the blade and the spindle. (See Figure 7)

CUTTER BLADES

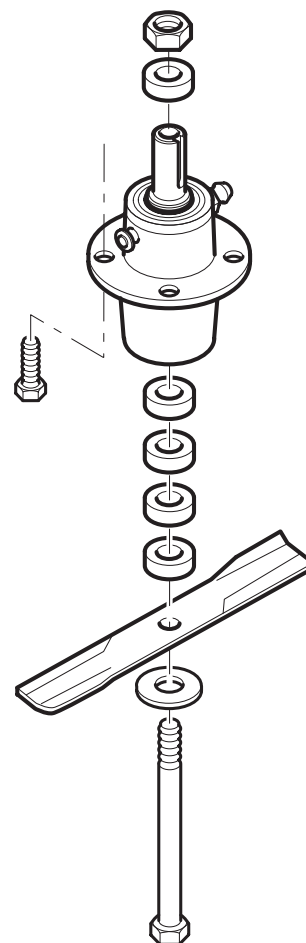
Do not sharpen beyond 1/3 of the width of the blade. (See Figure 8)

-NOTE-

Dress the blade with a file. Using a wheel grinder may burn the blade. Check the balance of the blade. If blades are out of balance, vibration and premature wear of spindle assembly can occur. See your authorized Scag dealer for blade balancing or special tools if you choose to balance your own blades.

! WARNING:

Always wear proper hand and eye protection when working with cutter blades.



2002 SWSPCRS

Figure 7. Blade Spacers

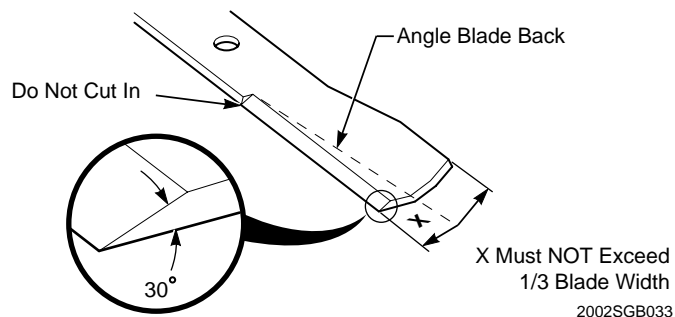


Figure 8. Blade Sharpening

Custom-Cut Baffle Adjustment

The Custom-Cut Baffle is designed to deliver optimum airflow and superior cutting performance in any type of grass. The Custom-Cut Baffle can be raised or lowered to precisely tailor the deck's performance for the type of grass being cut. The baffle can be set in three (3) different positions for optimum performance.

- A. 3" Position - baffle removed. (See Figure 10). With the baffle removed, the Advantage cutter deck will deliver the best quality-of-cut in very tall, wiry, tough to cut grass.
- B. 3-1/2" Position (factory setting) - baffle is installed using the bottom set of holes on the Custom Cut Baffle. (See Figure 11). For general purpose cutting, place the Custom Cut Baffle in the 3-1/2" position. This gives the best mix of cutting performance in all types of grass.
- C. 4" Position - baffle is installed using the top set of holes on the Custom Cut Baffle. (See Figure 12). Placing the baffle in the 4" setting will enhance fall cutting (leaf pickup) and reduce cutter deck "blowout".

To adjust the Custom-Cut Baffle height:

1. Place the cutter deck in the transport position.
2. Remove the hardware securing the Custom-Cut Baffle to the cutter deck. (See Figure 9).

-NOTE-

Hardware location used in the illustrations are for reference only. Location of hardware may vary depending on the cutter deck size.

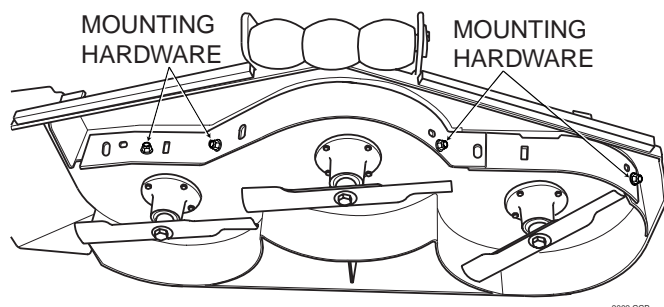


Figure 9. Custom Cut Baffle

3. Move the Custom-Cut Baffle to desired position. (See Figures 10 through 12 for position)
4. Reinstall the mounting hardware as shown. (See Figures 11 through 12). Torque hardware to 39ft.lbs.

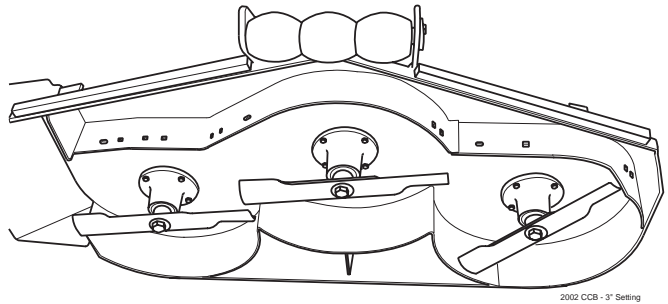


Figure 10. 3" Custom Cut Baffle Position

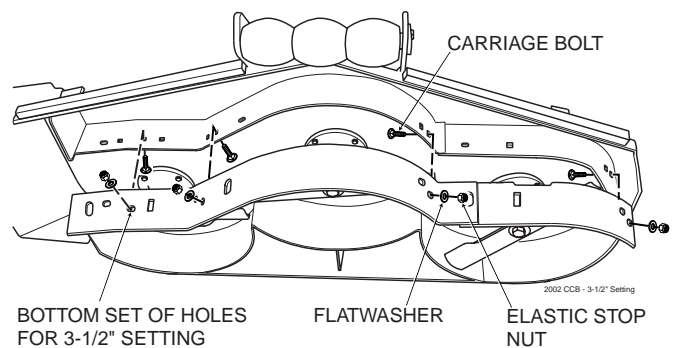


Figure 11. 3-1/2" Custom Cut Baffle Position

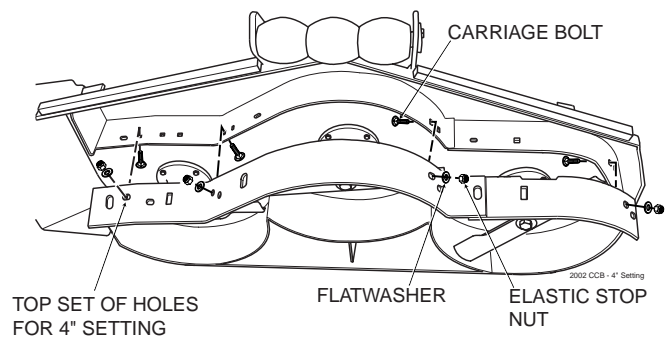
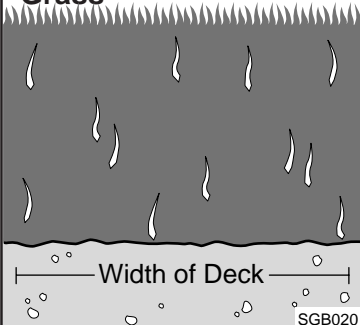
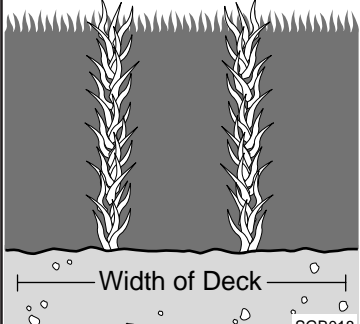
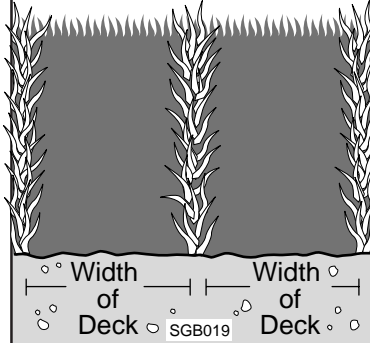


Figure 12. 4" Custom Cut Baffle Position

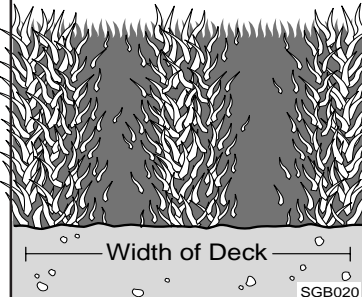
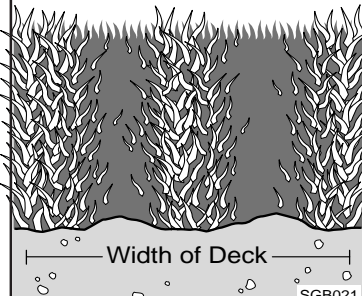
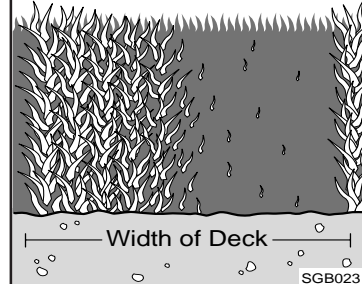
LUBRICATION & MAINTENANCE

BREAK-IN		+ Grease spindle until grease comes out the relief valve.	
X X	8 HOURS (DAILY)	Compatible Greases:	
	40 HOURS (WEEKLY)	Lidok EP #2 (found at industrial shops)	
	100 HOURS (BIWEEKLY)	Ronex MP (Exxon service stations)	
	500 HRS OR ANNUALLY	Shell Alvania (Shell service stations)	
		Mobilux #2 (Mobil service stations)	
		Super Lub M EP #2 (Conoco service stations)	
		PROCEDURE	COMMENTS
		Check all hardware for proper tightness Change engine oil and filter at 5 hours	
X	X	Check engine oil	Do not over fill
X	X	Remove debris from under belt cover	More often if needed
X	X	Sharpen cutter blades	More often if needed
X	X	Grease spindle bearings	+ US Lithium MP White Grease 2125
X	X	Clean air filter	More often if needed
X	X	Check belt tension	
X	X	Check tire pressure	Add or adjust as required
	X	Change engine oil	See engine mfg. information
	X	Replace air filter	More often if needed
	X	Grease caster wheel bearings	Chassis grease
	X	Grease caster wheel pivot shafts	Chassis grease
	X	Grease idler pulley bracket on cutter deck	Chassis grease
	X	Grease drive wheel bearings	Chassis grease
	X	Grease transmission couplers	Chassis grease
	X	Grease idler bracket LH & RH	Chassis grease
	X	Check all hardware for proper tightness	More often if needed
	X	Adjust air gap on electric clutch	Contact your Scag dealer for information about making this adjustment

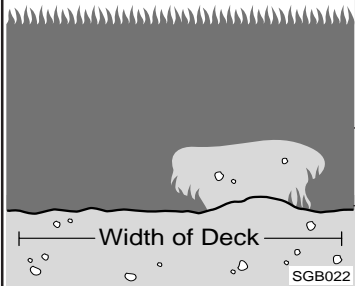
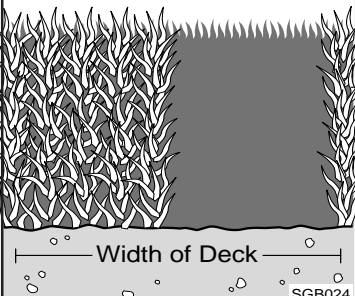
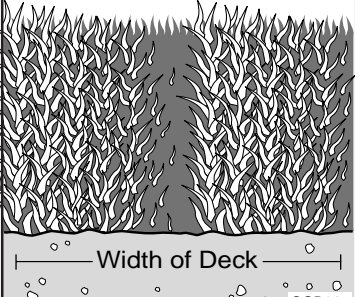
TROUBLESHOOTING CUTTING CONDITIONS

CONDITION	CAUSE	CURE
Stringers - Occasional Blades of Uncut Grass 	Low engine RPM	Run engine at full 3600 RPM
	Ground speed too fast	Slow speed to adjust for conditions
	Wet grass	Cut grass after it has dried out
	Dull blades, incorrect sharpening	Sharpen blades
	Deck plugged, grass accumulation	Clean underside of deck
	Belts slipping	Adjust belt tensions
Streaking - Strips of Uncut Grass in Cutting Path 	Dull, worn blades	Sharpen blades
	Incorrect blade sharpening	Sharpen blades
	Low engine RPM	Run engine at full 3600 RPM
	Belt slipping	Adjust belt tension
	Deck plugged, grass accumulation	Clean underside of deck
	Ground speed too fast	Slow speed to adjust for conditions
	Wet grass	Cut grass after it has dried out
	Bent blades	Replace blades
Streaking - Strips of Uncut Grass Between Cutting Paths 	Not enough overlapping between rows	Increase the overlap of each pass

TROUBLESHOOTING CUTTING CONDITIONS

CONDITION	CAUSE	CURE
Uneven Cut on Flat Ground - Wavy High-Low Appearance, Scalloped Cut, or Rough Contour  <small>SGB020</small>	Lift worn off of blade	Replace blade
	Blade upside down	Mount with cutting edge toward ground
	Deck plugged, grass accumulation	Clean underside of deck
	Too much blade angle (deck pitch)	Adjust pitch and level
	Deck mounted improperly	See your authorized SCAG dealer
	Bent spindle area	See your authorized SCAG dealer
	Dull blade	Sharpen blade
Uneven Cut on Uneven Ground - Wavy Appearance, High-Low Scalloped Cut, or Rough Contour  <small>SGB021</small>	Uneven ground	May need to reduce ground speed, raise cutting height, and/or change direction of cut
Sloping Ridge Across Width of Cutting Path  <small>SGB023</small>	Tire pressures not equal	Check and adjust tire pressure
	Wheels uneven	Check and adjust tire pressure
	Deck mounted incorrectly	See your authorized SCAG dealer

TROUBLESHOOTING CUTTING CONDITIONS

CONDITION	CAUSE	CURE
Scalping - Blades Hitting Dirt or Cutting Very Close to the Ground 	Low tire pressures	Check and adjust pressures
	Ground speed too fast	Slow speed to adjust for conditions
	Cutting too low	May need to reduce ground speed, raise cutting height, change direction of cut, and/or change pitch and level
	Rough terrain	May need to reduce ground speed, raise cutting height, and/or change direction of cut
	Ground speed too fast	Slow speed to adjust for conditions
Step Cut Ridge in Center of Cutting Path 	Blades not mounted evenly	Adjust pitch and level
	Bent blade	Replace blade
	Internal spindle failure	See your authorized SCAG dealer
	Mounting of spindle incorrect	See your authorized SCAG dealer
Slope Cut - Sloping Ridges Across Width of Cutting Path 	Bent spindle mounting area	See your authorized SCAG dealer
	Internal spindle failure	See your authorized SCAG dealer
	Bent deck housing	See your authorized SCAG dealer

TECHNICAL SPECIFICATIONS

MODELS

SW32-13KA, SW36A-13KA, SW36A-13KH, SW36A-15KA,
SW36A-15KH, SW48A-15KA, SW48A-15KH, SW48A-17KA,
SW52A-17KA, SW52A-18KH

ENGINE

General Type:

Heavy duty industrial/commercial

Brand / Model:

Kawasaki FB460V, FC451V & FH500V:

Kohler CV13, CV15T, CV493T

Horsepower:

Kawasaki FB460V=13 HP, FH451V=15HP, FH500V=17HP

Kohler CV13T=13HP, CV15T=15 HP, CV493T=18HP

Type:

Kawasaki 13 HP = 4 cycle gasoline engine, air cooled, single cylinder, vertical shaft engine. 15 HP & 17 HP 4 cycle, air cooled, V twin cylinder, vertical shaft engine.

Kohler 13 HP, 15 HP & 18 HP = 4 cycle gasoline engine, air cooled, single cylinder, vertical shaft engine.

Displacement:

Kaw. 13 HP=460cc, 15 HP=494cc: 17HP=494cc

Kohler 13 HP=398cc, 15 HP=426cc: 18 HP=490cc

Governor:

Mechanical type governor with variable speed control. Settings:

Kawasaki 13 HP & 15 HP = 3600 rpm (+/- 75 rpm), idle set at 1200 rpm (+/- 75rpm), 17HP = 3600 rpm (+/- 75 rpm), idle set at 1550 rpm (+/- 75 rpm)

Kohler 13 HP& 15 HP = 3600 rpm (+/- 50 rpm), idle set at 1200 rpm (+/- 75 rpm), 18HP = 3600 rpm (+/- 50 rpm), idle set at 1500 rpm (+/- 75 rpm)

Air Cleaner:

Large capacity dual element with cyclonic-type air filter.

Exhaust:

Single & dual exhaust canister muffler.

Starter/Electrical:

Electronic ignition with recoil starter.

Fuel Pump Group:

Varied - See manufacturer's specification.

Oil Pump Group:

Varied - See manufacturer's specification.

Valve Group:

Varied - See manufacturer's specification.

ENGINE DECK

Thickness:

7 gauge steel.

Fuel Tank:

5 gallon (19.0 liters) seamless polyethylene.

Drive Wheels/Tires:

13.0 x 6.50-6 two-ply pneumatic tubeless.

Handle Bars:

1-1/4" diameter.

DRIVE SYSTEM

Type:

Belt drive with twin power belts for increased friction to pulley surface.

Transmissions:

Peerless 5-speed transmission, Model #700-070A.

Steering/Travel Control:

Clutch/brake fingertip steering, key lock switch. (EZ Grip design allows minimum hand force to operate controls.)

Brakes:

6" drum, band brake, one on each wheel.

Axles:

1"

Wire Harness:

14 gauge wire.

Safety Group:

Hand actuated operator presence system with blade clutch and transmission interlock to engine kill.

Forward Speed Range:

0 to 6.0 mph

Reverse Speed Range:

0 to 2.0 mph

TECHNICAL SPECIFICATIONS (CON'T)

CUTTER DECK

Type:	SWM 32, SWM 36A, SWM48A, SWM 52A
Construction:	Out-front design with anti-scalp rollers.
True Cutting Width:	SWM32-48: 7-gauge steel with 7-gauge (3/16") steel skirt SWM52: 10-gauge steel with 7-gauge (3/16") steel skirt SWM32=32.0" (81.3cm), SWM36=36.0" (90.2cm), SWM48=48.0" (122.0cm), SWM48A=(122.0cm), SWM52=52.0" (132.0cm)
Blade Engagement:	Electric blade engagement clutch with control panel switch
Cutting Height Adjustment:	Manual adjustment 1-3/4" to 4-1/2" in 1/4" increments.
Cutter Blades:	.197 Thick, Milled Edge, Wear Resistant Marbainô SWM32 = Two (2) 16.5" blades, SWM36 = Two (2) 18" blades, SWM48 = Three (3) 16.5" blades, SWM52 = Three (3) 18" blades
Discharge Opening:	SWM32, 36, 52 Extra wide 11.5", SWM48 Extra wide 13.5",
Caster Wheels:	9.4 x 3.5 smooth-tread flotation, inner tubes, split rims, roller bearings, with quick pin removal.
Spindles:	Cast housing, taper roller bearing, low maintenance with top access grease fitting and grease overfill relief poppet.
Spindle Pulleys:	Cast-iron with easily removed taper hubs
Cutter Deck Belts:	B-section with Kevlar cord.

ADDITIONAL SPECIFICATIONS

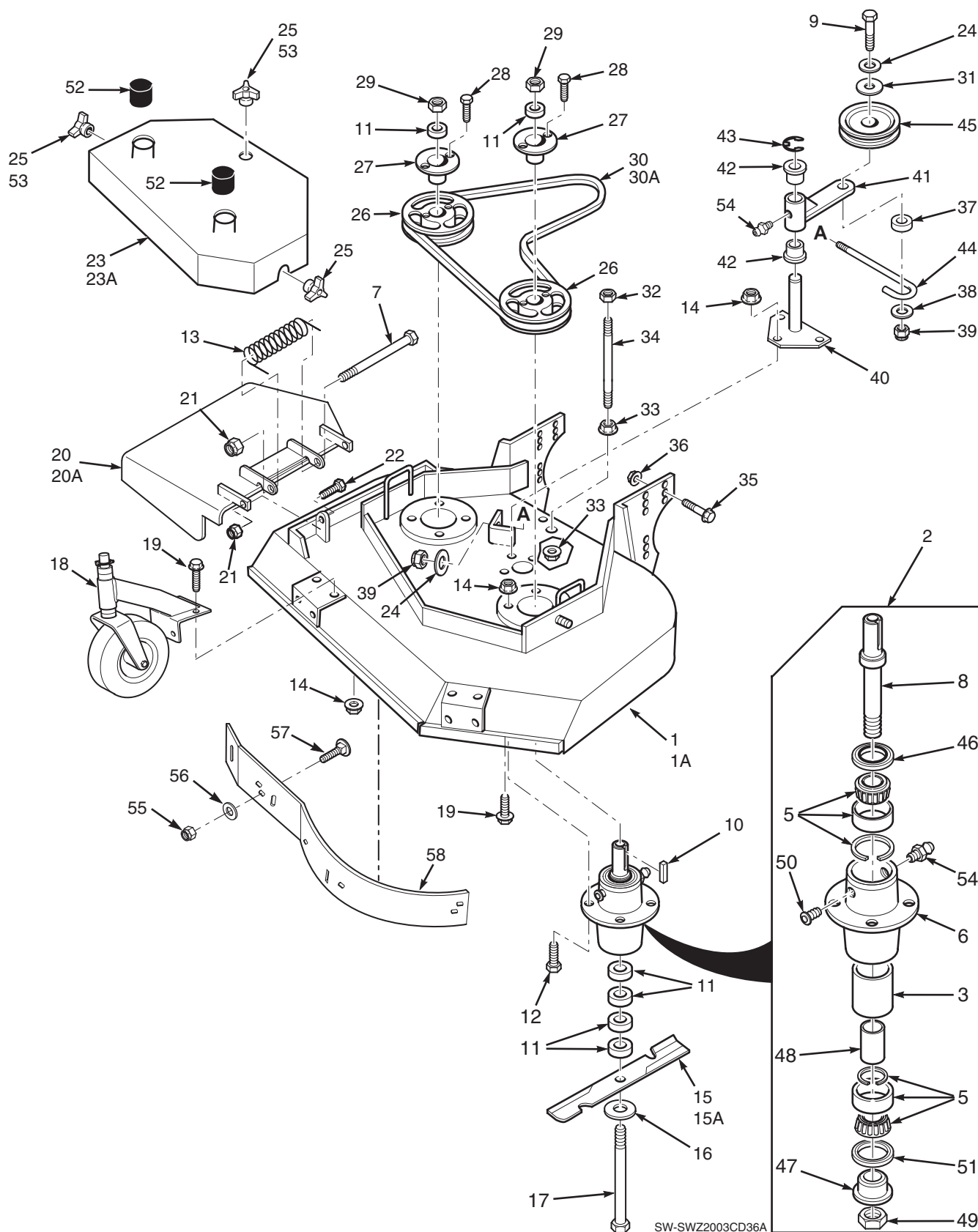
OPTIONAL ITEMS/ATTACHMENTS

Fabric Grass Catcher:	GC-F4 Grass Catcher with 4 cubic ft. capacity
Metal Grass Catcher:	GC-4D Grass Catcher with 4 cubic ft. capacity and rope pull dump or pick-up and dump.
Mulch Master:	Steel plate fits over discharge opening and steel baffles between each blade with Eliminator Blades. Installs and removes in the field.
EZ-GRIP-SW	Provides reduced hand force at operator steering controls.

APPROXIMATE DIMENSIONS

	SWM32	SWM36A	SWM48A	SWM52A
Length:	70.0"	75.0"	79.0"	79.0"
Length with grass catcher:	70.0"	72.0"	76.0"	76.0"
Tracking Width:	32.0"	37.0"	37.0"	37.0"
Width:	43.0"	48.0"	60.0"	60.0"
Width (with discharge chute up):	33.0"	38.0"	50.0"	53.0"
Width with grass catcher:	51.0"	56.0"	68.0"	71.0"
Height:	40.5"	40.5"	40.5"	40.5"
Height with grass catcher:	40.5"	40.5"	40.5"	40.5"
Weight:	440 lbs.	475 lbs.	525 lbs.	535 lbs.
Weight with GC-F4 grass catcher:	480 lbs.	515 lbs.	565 lbs.	575 lbs.
Weight with GC-4D grass catcher:	490 lbs.	525 lbs.	575 lbs.	585 lbs.

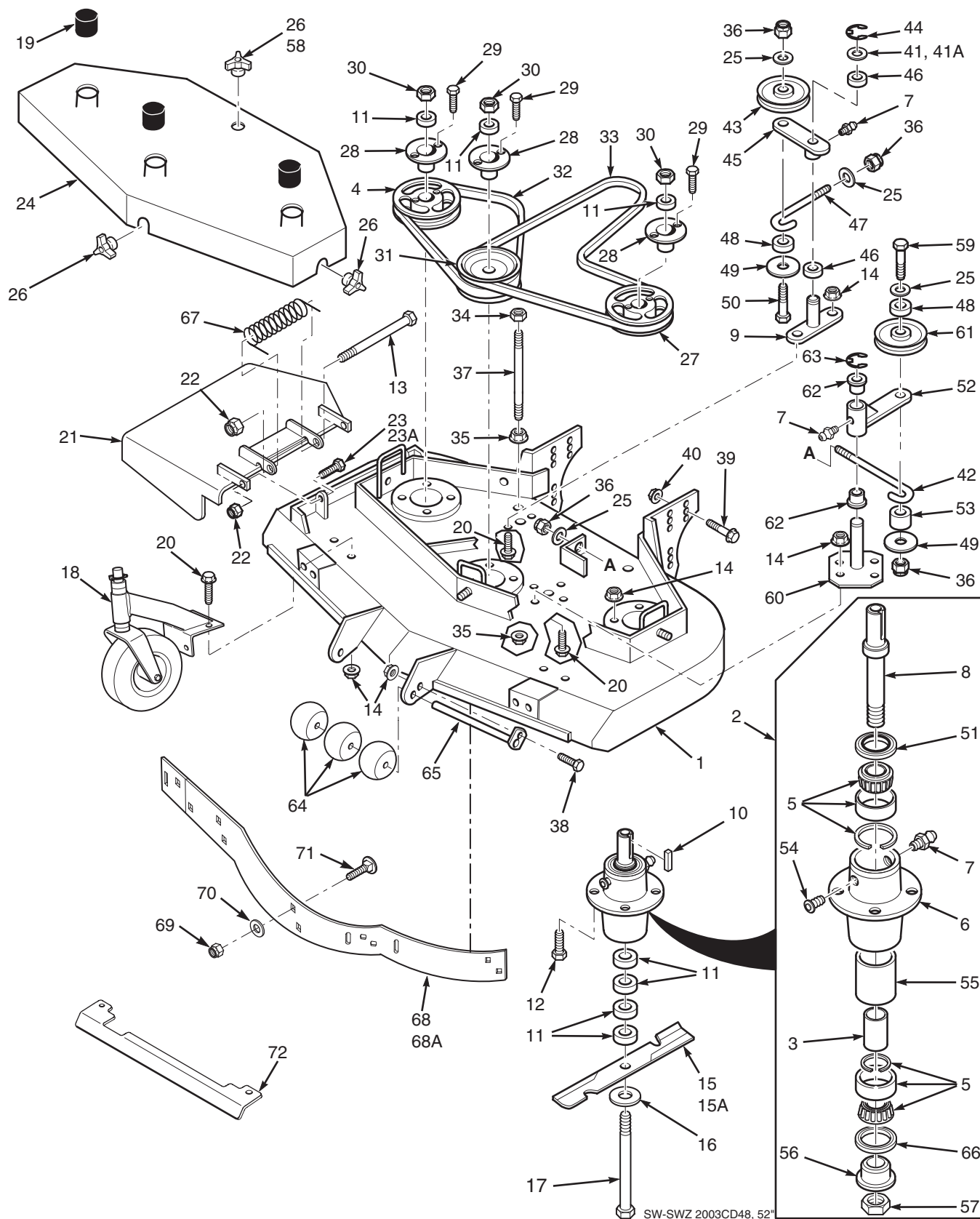
32" & 36A" CUTTER DECKS



32" & 36A" CUTTER DECKS

Ref. Part				Ref. Part			
No.	Number	Description	32 36A	No.	Number	Description	32 36A
1	461551	Cutter Deck (Includes Decals)	x	42	48100-02	Bronze Bearing	x x
1A	461554	Cutter Deck (Includes Decals)	x	43	04050-05	Retaining Ring, 1-1/8" Ext. "E"	x x
2	46631	Cutter Spindle Assy.	x x	44	44078	J-Hook	x x
3	43312	Spacer, Outside	x x	45	482416	Idler Pulley, Belt Clutch	x x
5	481022	Tapered Bearing (Two)	x x	46	481024	Seal, Cutter Spindle	x x
6	43294	Spindle Housing	x x	47	43297	Spindle Bushing	x x
7	04001-154	Bolt, 5/16-18 x 4-3/4" Hex Head	x x	48	43296	Spacer, Inside	x x
8	43589	Spindle Shaft	x x	49	481035	Nut, 1.06-18	x x
9	04001-77	Bolt, 3/8-16 x 3-1/2" Hex Head	x x	50	48677	Relief Fitting, Cutter Spindle	x x
10	04063-08	Key, 1/4 x 1/4 x 2"	x x	51	481025	Seal, Cutter Spindle	x x
11	43592	Spacer, Cutter Blade - Small	x x	52	48098	Spindle Shield	x x
12	04001-10	Bolt, 5/16-18 x 1-1/4" Hex Head	x x	53	04029-04	Wing Nut, 3/8-16 (Small) RH side	x x
13	482245	Spring, Chute Return	x x	54	48114-04	Grease Fitting	x x
14	04019-03	Nut 5/16-18 Serrated Flange	x x	55	04021-09	Nut, Hex Elastic Stop 3/8-16	x x
15	482461	Cutter Blade, 16-1/2" Marbain	x	56	04041-07	Flatwasher, 3/8" (.391 x .938 x .105)	x x
15	482462	Cutter Blade, 18" Marbain	x	57	04003-23	Bolt, Carriage 3/8-16 x 1"	x x
15A	482466	Cutter Blade 16-1/2 Hi Lift Marbain	x	58	423655	Baffle Weldment	x
15A	482467	Cutter Blade, 18 Hi Lift Marbain	x				
16	04043-06	Flatwasher, 5/8 W	x x				
17	04001-41	Hex Hd. Bolt, 5/8-11 x 9-1/2"	x x				
18	46079	Caster Assembly	x x				
19	04017-16	Cpscrw, 5/16-18 x 3/4" Ser.Flg. Hex Head	x x				
20	461291	Discharge Chute	x				
20A	461295	Discharge Chute	x				
21	04021-10	Hex Nut, 5/16-18 Elastic Stop	x x				
22	04001-09	Hex Hd Bolt, 5/16-18 x 1"	x x				
23	46853	Belt Cover Assy (Includes Decal)	x				
23A	461413	Belt Cover Assy (Includes Decal)	x				
24	04041-07	Flat Washer, 3/8" Special	x x				
25	04029-03	Wing Nut, 3/8-16	x x				
26	48924	Pulley	x x				
27	48926	Tapered Hub	x x				
28	04001-01	Hex Hd. Bolt, 1/4-20 x 3/4"	x x				
29	04020-09	Hex Nut, 5/8-11	x x				
30	48278	Belt, Blade Drive	x				
30A	48204	Belt, Blade Drive	x				
31	43077	Spacer	x x				
32	04021-05	Hex Nut, 3/8-16 Center Locknut	x x				
33	04019-04	Nut, 3/8-16 Serrated Flange	x x				
34	04004-02	Support, Belt Cover	x x				
35	04017-36	Cpscrw, 1/2-13 x 1" Ser.Flg. HH	x x				
36	04112-05	Nut, 1/2-13 Spiralock	x x				
37	43277	Spacer, J-Hook	x x				
38	04041-12	Washer, 3/8 x 1-1/2 x 16 GA	x x				
39	04021-09	Elastic Stop Nut, 3/8-16	x x				
40	45423	Idler Pivot	x x				
41	46748	Idler Arm Assy. (Inc. 22 & 58)	x x				

48A, 52A" CUTTER DECKS

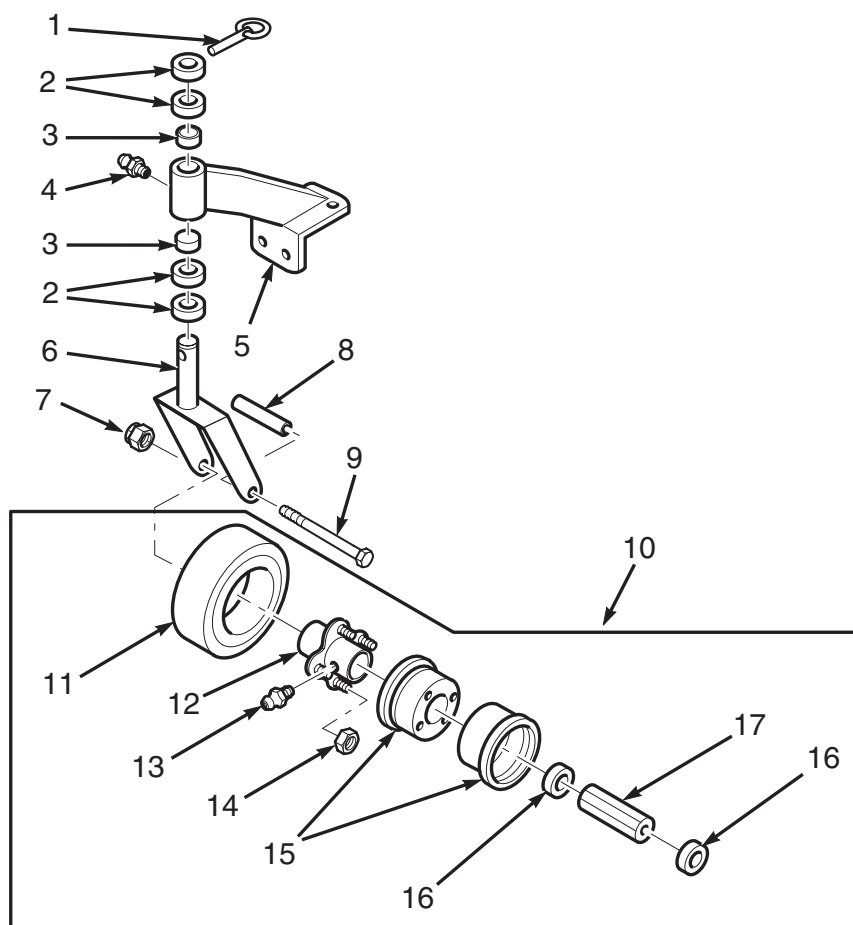


SW-SWZ 2003CD48, 52"

48A, 52A" CUTTER DECKS

Ref. Part No. No.	Description	48A	52A	Ref. Part No. No.	Description	48A	52A
1	461557 Cutter Deck (Includes decals)	x		40	04112-05 Nut, 1/2-13 Spiralock	x	x
	461559 Cutter Deck (Includes decals)		x	41	04041-08 Flat Washer 3/4" Special	x	x
2	46631 Spindle Assembly	x	x	41A	04041-08S Flat Washer 3/4" Special	x	x
3	43296 Spacer, Inside	x	x	42	44078 J-Hook	x	x
4	48924 Pulley	x	x	43	48181 Idler Pulley, "V" Groove	x	x
5	481022 Tapered Bearing (Two)	x	x	44	04050-02 Retaining Ring, 3/4" Ext."E"	x	x
6	43294 Spindle Housing	x	x	45	46081 Idler Arm Assy. (Incl. 7 & 61)	x	x
7	48114-04 Grease Fitting Str. 5/16"	x	x	46	48100-05 Bronze Bearing	x	x
8	43589 Spindle Shaft, Tapered Brng	x	x	47	43028 J-Rod, Idler Pulley	x	x
9	45037 Idler Pivot	x	x	48	43077 Spacer, J-Rod	x	x
10	04063-08 Key, 1/4 x 1/4 x 2"	x	x	49	04041-12 Washer, 3/8 x 1-1/2 x 16 ga.	x	x
11	43592 Spacer, Cutter Blade - Small	x	x	50	04001-46 Bolt, 3/8-16 x 2-1/4" Hex Head	x	x
12	04001-10 Bolt, 5/16-18 x 1-1/4" Hex Head	x	x	52	481024 Seal, Cutter Spindle	x	x
13	04001-154 Bolt, 5/16-18 x 4-3/4" Hex Head	x	x	52	46748 Idler Arm Assy (Includes 22 & 77)	x	x
14	04019-03 Serrated Flange Nut, 5/16-18	x	x	53	43277 Spacer, J-Rod	x	x
15	482461 Cutter Blade 16-1/2" Marbain	x		54	48677 Relief Fitting, Cutter Spindle	x	x
15	482462 Cutter Blade 18" Marbain		x	55	43312 Spacer, Outside, Cutter Spindle	x	x
15A	482466 Cutter Blade 16-1/2 High Lift Marbain	x		56	43297 Spindle Bushing	x	x
15A	482467 Cutter Blade 18 High Lift Marbain		x	57	481035 Nut, Cutter Spindle	x	x
16	04043-06 Flatwasher, 5/8" (.688 x 1.75 x .134)	x	x	58	04029-04 Wing Nut, 3/8-16 (Small) Top Side	x	x
17	04001-41 Hex Head Bolt, 5/8-11 x 9-1/2"	x	x	59	04001-77 Bolt, 3/8-16 x 3-1/2" Hex Head	x	x
18	46079 Caster Assembly	x	x	60	45329 Idler Pivot	x	x
19	48098 Spindle Shield	x	x	61	482416 Idler Pulley, Belt Clutch	x	x
20	04017-16 Capscrew, 5/16-18 x 3/4"	x	x	62	48100-02 Bronze Bearing	x	x
21	461295 Discharge Chute	x	x	63	04050-05 Retaining Ring	x	x
22	04021-04 Nut, 5/16-18 Elastic Elastic Stop	x	x	64	482295 Guide Roller	x	x
23	04001-11 Bolt, 5/16-18 x 1-1/2" Hex Head (Front)	x	x	65	45944 Roller Shaft	x	x
23A	04001-12 Bolt, 5/16-18 x 1-3/4" Hex Head (Rear)	x	x	66	481025 Seal, Cutter Spindle	x	x
24	461095 Belt Cover (Includes decals)	x		67	482245 Spring, Chute Return	x	x
	46804 Belt Cover (Includes decals)		x	68	451507 Baffle Weldment 48A	x	
25	04041-07 Flat Washer, 3/8" Special	x	x	68A	451508 Baffle Weldment 52A		x
26	04029-03 Wing Nut, 3/8-16 (Large)	x	x	69	04021-09 Nut, Hex Elastic Stop 3/8-16	x	x
27	48924 Pulley	x	x	70	04041-07 Flatwasher, 3/8" (.391 x .938 x .105)	x	x
28	48926 Tapered Hub	x	x	71	04003-23 Bolt, Carriage 3/8-16 x 1"	x	x
29	04001-01 Bolt, 1/4-20 x 3/4" Hex Head	x	x	72	423747 Heatshield	x	x
30	04020-09 Nut, 5/8-11 Hex	x	x				
31	48923 Pulley, Double	x	x				
32	48087 Belt, RH Blade Drive	x					
	48285 Belt, RH Blade Drive		x				
33	48089 Belt, Blade Drive	x					
	48286 Belt, Blade Drive		x				
34	04021-05 Nut, 3/8-16, Nut Centerlock	x	x				
35	04019-04 Nut, 3/8-16, Serrated Flange	x	x				
36	04021-09 Nut, 3/8-16 Elastic Stop	x	x				
37	04004-02 Support, Belt Cover	x	x				
38	04001-09 Bolt, 5/16-18 x 1" Hex Head	x	x				
39	04017-36 Cpscrw, 1/2-13 x 1" Ser.Flgs. HH	x	x				

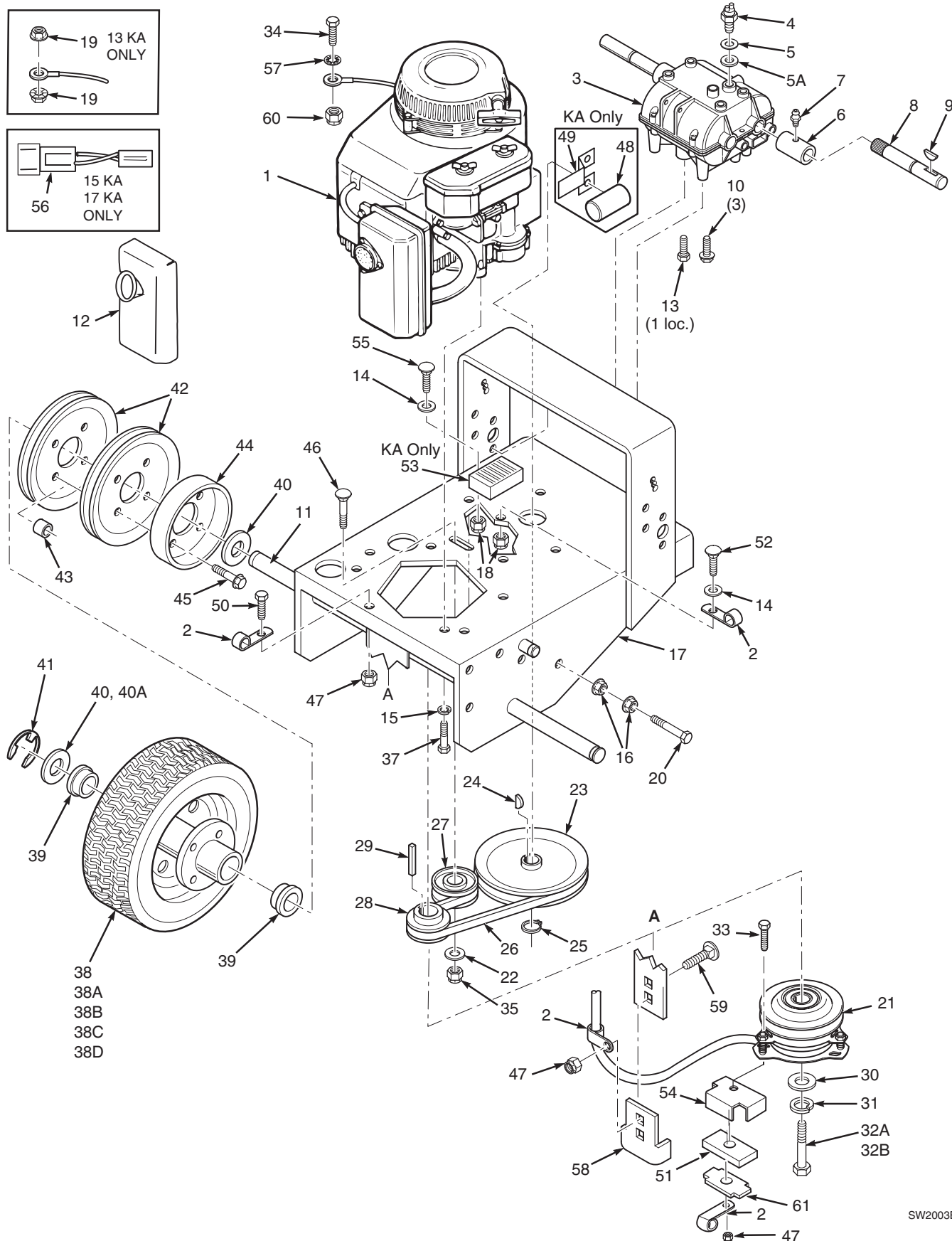
CASTER ASSEMBLY



SW-SWZ2003CSTR

Ref. No.	Part No.	Description	32 48A	36A 52A
1	04066-01	Quick Pin	x	x
2	43037-01	Spacer, Caster Yoke, 1/2" Long	x	x
3	48100-01	Bronze Bearing	x	x
4	48114-04	Grease Fitting	x	x
5	46082	Support Assembly (Includes Items (3 & 4))	x	x
6	45006	Caster Yoke	x	x
7	04021-07	Elastic Stop Nut, 1/2-13	x	x
8	43022	Sleeve, Caster Wheel Bearing	x	x
9	04001-37	Hex Hd. Bolt, 1/3-13 x 5-1/2"	x	x
10	48307	Wheel Assy. (Includes Items 11-17)	x	x
11	481774	Tire Only, Caster Wheel	x	x
	481773	Inner Tube Only (Not Shown)	x	x
12	481768	Hub Assembly	x	x
13	48114-03	Grease Fitting, 45 Degree 1/4-28	x	x
14	481771	Tapered Nut, 5/16-24	x	x
15	481772	Rim Pair, Caster Wheel	x	x
16	481770	Retainer, Bearing, Caster Wheel	x	x
17	481769	Roller Bearing, Caster Wheel	x	x

ENGINE DECK

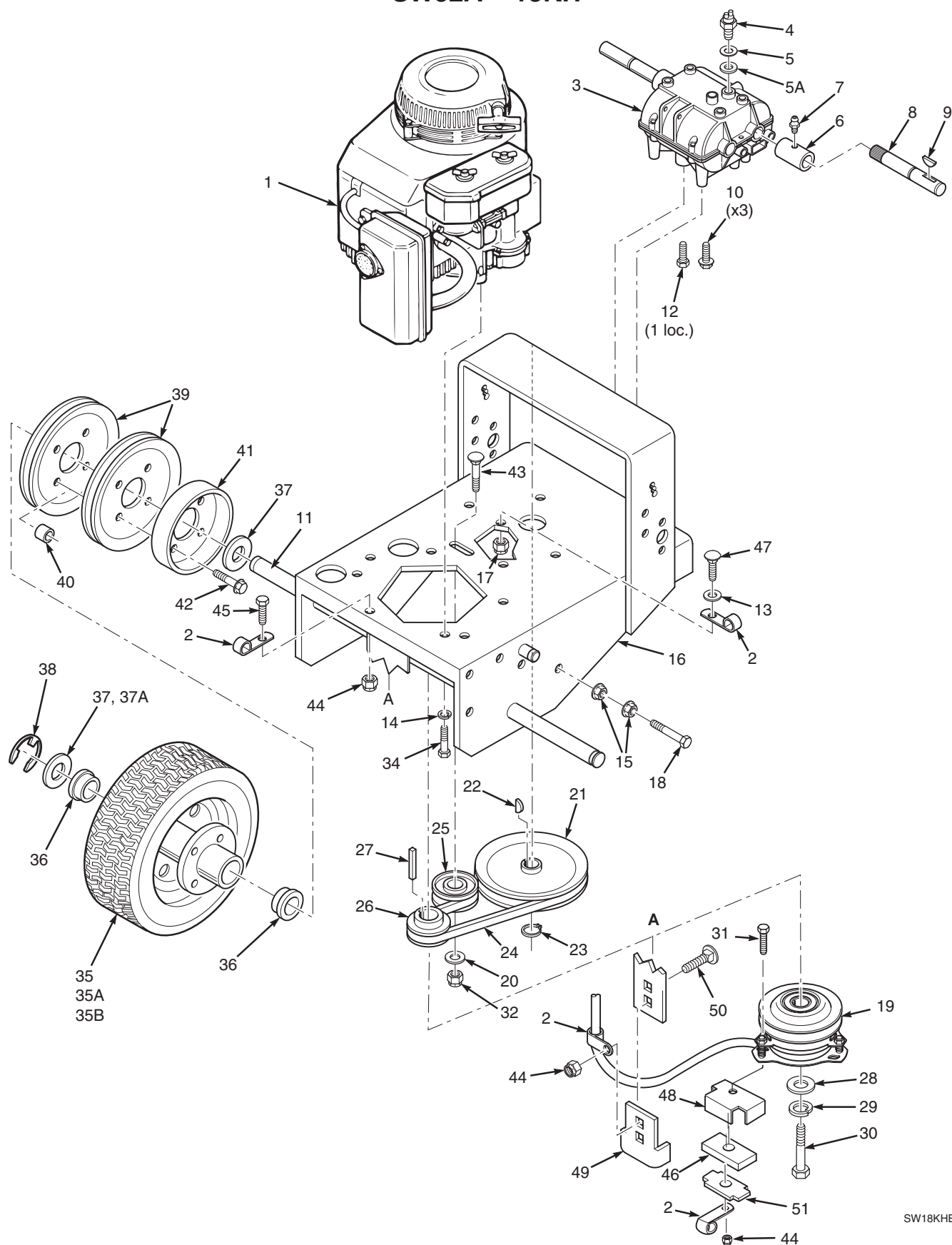


ENGINE DECK

Ref. No.	Part No.	Description	13KH 15KH	13KA	15KA 17KA	Ref. No.	Part No.	Description	13KH 15KH	13KA	15KA 17KA
1	481775	Engine, 13HP Kohler (CV13T, SpecPS-21530)	x			31	04030-05	Lock Washer, 7/16"	x	x	x
	481757	Engine, 15HP Kohler (CV 15T, Spec PS-41581)	x			32A	04102-04	Bolt, 7/16-20 x2-1/2" Hex Head			x
	48841	Engine 12.5HP Kawasaki (Spec FB460-AS37)		x		32B	04103-03	Cpsrw, M10-1.5 x55 Metric Hex Hd	x	x	
	482144	Engine, 15HP Kawasaki (Spec FH451V-AS09)			x	33	04001-12	Bolt, 5/16-18 x 1-3/4" Hex Head	x	x	x
	481563	Engine, 17HP Kawasaki (FH500V-BS09)			x	34	04002-07	Bolt, M8-1.25 x 1.0	x		
2	48030-09	Cable Clamp	x	x	x	35	04021-09	Nut, 3/8-16 Elastic Stop	x	x	x
3	481580	Transmission, 5-speed (Peerless 700-070, 9 tooth spline)	x	x	x	36	04040-15	Flat Washer, 5/16"	x	x	x
4	48231	Neutral Safety Switch	x	x	x	37	04018-01	Bolt, M8-1.25 x M25 Metric Hex Hd	x	x	
5	48122-01	Fibre Washer, thin	x	x	x	38	48192	Wheel Assembly (incl. 38A-38B) (fits SW36,48,52)	x	x	x
5A	48122-02	Fibre Washer, thick	x	x	x	38	48253	Wheel Assembly (incl. 38C-38D) (SW32)	x	x	
6	481581	Coupler, Jackshaft	x	x	x	38A	481860	Tire, 13 x 6.50-6, 2-ply (fits SW36,48,52)	x	x	x
7	48114-05	Grease Fitting, straight 1/4-28	x	x	x	38B	481859	Rim & Bearing Assembly (incl. 39) (fits SW36,48 & 52)	x	x	x
8	481582	Jackshaft (fits SW32,36,48 & 52)	x	x	x	38C	481861	Tire, 13 x 5.00-6 2-ply (SW32 only)		x	
9	04063-09	Key, Hi-Pro #9	x	x	x	38D	481862	Rim Assembly (incl. 39) (SW32 only)		x	
10	04003-12	Bolt, 5/16-18 X 3/4" Carriage	x	x	x	39	481858	Wheel Bearing (OD 2.000 - 2.005)	x	x	x
11	43085	Wheel Axle (SW36,48 & 52) **	x	x	x	40	04042-05	Washer, 1-1/16 x 1-3/4 x 12 ga	x	x	x
	43104	Wheel Axle (SW 32) **		x		40A	04041-14	Washer, 1-1/16 x 1-1/2 x 18 ga	x	x	x
12	49070-7002	Muffler (Purchase from Kawasaki)			x	41	04050-08	Retaining Ring, 1" Ext.- "E"	x	x	x
13	04001-08	Bolt, 5/16-18 X 3/4" Hex Head	x	x	x	42	48200	Pulley, Wheel Drive	x	x	x
14	04040-14	Flat Washer 1/4" (.312 X .75 X .065)	x	x	x	43	43088	Spacer, Wheel Pulley	x	x	x
15	04030-03	Lock Wshr. 5/16"	x	x	x	44	48209	Brake Drum	x	x	x
16	04019-04	Nut, 3/8-16 Serrated Flange	x	x	x	45	04017-19	Bolt, 5/16-18 x 1-1/2" Serrated flange	x	x	x
17	461533	Engine Deck (fits SW32)		x		46	04003-03	Bolt, 3/8-16 x 2" Carriage	x	x	x
	461536	Engine Deck (fits SW36,48 & 52)	x	x	x	47	04021-10	Nut, 5/16-18 Elastic Stop	x	x	x
18	04021-08	Nut, 1/4-20 Elastic Stop	x	x	x	48	21013-2064	Condenser (order from Kawasaki)		x	
19	04019-03	Nut, 5/16-18 Serrated Flange		x	x	49	422930	Bracket, Capacitor		x	
20	04001-51	Bolt, 3/8-16 x 3-3/4" Hex Head	x	x	x	50	04001-09	Bolt, 5/16-18 x 1" Hex Head	x	x	x
21	461397	Electric Clutch (Ogura)	x	x	x	51	481716	Rubber Pad, Clutch Stop	x	x	x
22	04041-07	Washer, 3/8" (.391 x .938 x .105)	x	x	x	52	04003-02	Bolt, 1/4-20 x 3/4" Carriage	x	x	x
23	48197	Pulley, Transmission Input	x	x	x	53	21066-2071	Rectifier (order from Kawasaki)		x	
24	04063-07	Key, Woodruff #9	x	x	x	54	422533	Backing Plate	x	x	x
25	04050-09	Retaining Ring, 5/8" Ext, Basic	x	x	x	55	04001-59	Bolt, 1/4-20 x 1-1/4"	x	x	
26	48203	Belt, Transmission Drive	x	x	x	56	481717	Wire Harness Adapter (15KA & 17KA)			x
27	481048	Idler Pulley, Transmission	x	x	x	57	04031-09	Lock Washer Internal Tooth	x	x	x
28	481666	Pulley, Traction Drive	x	x	x	58	421370	Anti Rotation Bracket	x	x	x
29	04063-19	Key, 1/4 x 1/4 x 3/4"	x	x	x	59	04003-04	Bolt, 5/16-18 x 1" Carriage	x	x	x
30	04041-28	Flat Washer, 7/16" Special	x	x	x	60	04021-08	Nut, 1/4-20 Elastic Stop	x	x	x
						61	422534	Plate, Backing	x	x	x

** = Requires welding onto chassis.

**ENGINE DECK
SW52A - 18KH**

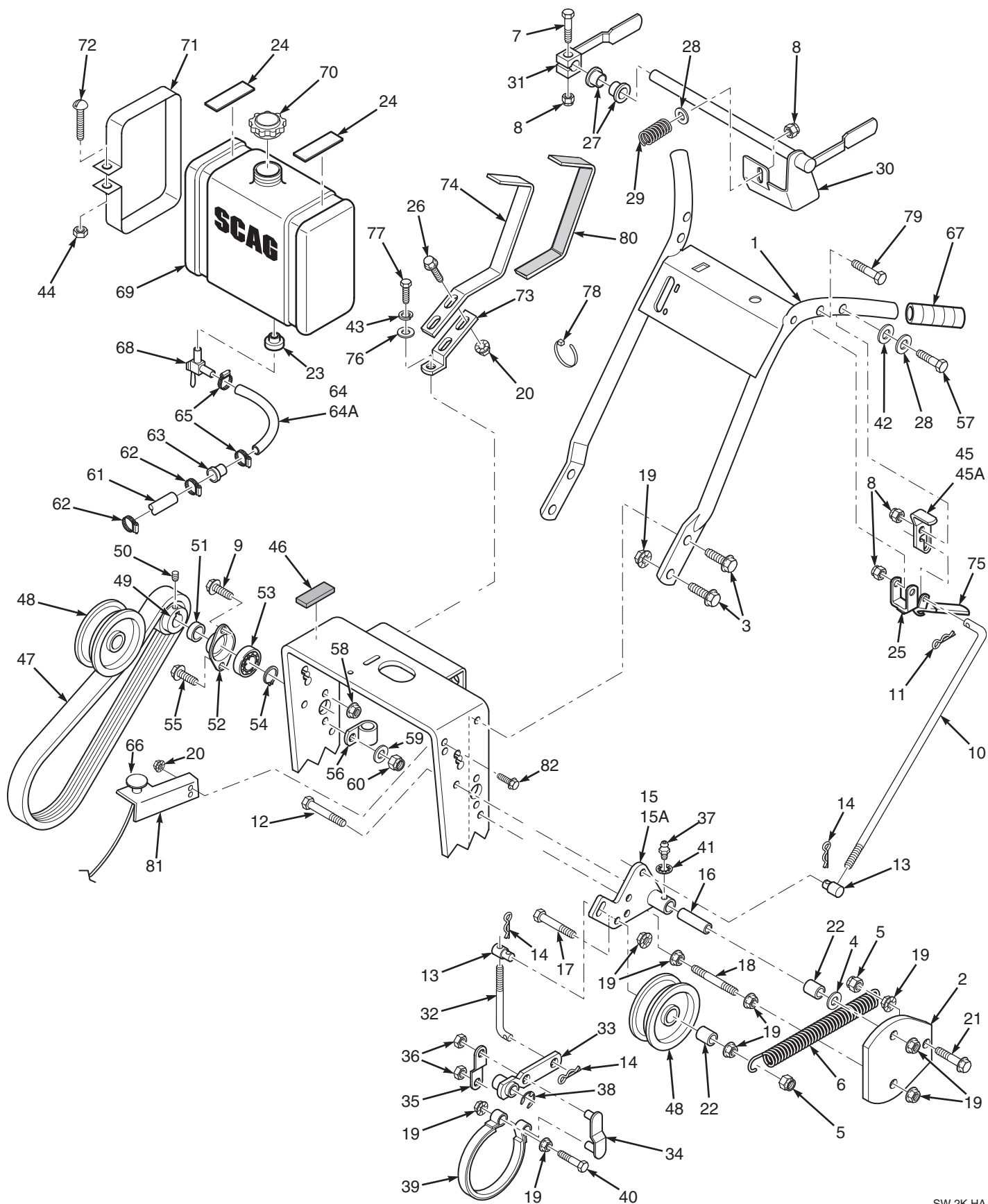


ENGINE DECK SW52 - 18KH

Ref. Part No. No.	Description	Ref. Part No. No.	Description
1 482677	Engine, 18HP Kohler (CV493T, SpecPS-27513)	30 04102-04	Bolt, 7/16-20 x 2-1/2" Hex Head
2 48030-09	Cable Clamp	31 04001-12	Bolt, 5/16-18 x 1-3/4" Hex Head
3 481580	Transmission, 5-speed (Peerless 700-070, 9 tooth spline)	32 04021-09	Nut, 3/8-16 Elastic Stop
4 48231	Neutral Safety Switch	33 04040-15	Flat Washer, 5/16"
5 48122-01	Fibre Washer, thin	34 04017-19	Bolt, 5/16-18 x 1" Serrated Flange Hex Head
5A 48122-02	Fibre Washer, thick	35 48192	Wheel Assembly (incl. 38A-38B)
6 481581	Coupler, Jackshaft	35A 481860	Tire, 13 x 6.50-6, 2-ply
7 48114-05	Grease Fitting, straight 1/4-28	35B 481859	Rim & Bearing Assembly (incl. 39)
8 481582	Jackshaft	36 481858	Wheel Bearing (OD 2.000 - 2.005)
9 04063-09	Key, Hi-Pro #9	37 04042-05	Washer, 1-1/16 x 1-3/4 x 12 ga
10 04003-12	Bolt, 5/16-18 X 3/4" Carriage	37A 04041-14	Washer, 1-1/16 x 1-1/2 x 18 ga
11 43085	Wheel Axle **	38 04050-08	Retaining Ring, 1" Ext.- "E"
12 04001-08	Bolt, 5/16-18 X 3/4" Hex Head	39 48200	Pulley, Wheel Drive
13 04040-14	Flat Washer 1/4" (.312 X .75 X .065)	40 43088	Spacer, Wheel Pulley
14 04030-03	Lock Wshr. 5/16"	41 48209	Brake Drum
15 04019-04	Nut, 3/8-16 Serrated Flange	42 04017-19	Bolt, 5/16-18 x 1-1/2" Serrated flange
16 461536	Engine Deck	43 04003-03	Bolt, 3/8-16 x 2" Carriage
17 04021-08	Nut, 1/4-20 Elastic Stop	44 04021-10	Nut, 5/16-18 Elastic Stop
18 04001-51	Bolt, 3/8-16 x 3-3/4" Hex Head	45 04001-09	Bolt, 5/16-18 x 1" Hex Head
19 461397	Electric Clutch (Ogura)	46 481716	Rubber Pad, Clutch Stop
20 04041-07	Washer, 3/8" (.391 x .938 x .105)	47 04003-02	Bolt, 1/4-20 x 3/4" Carriage
21 48197	Pulley, Transmission Input	48 422533	Backing Plate
22 04063-07	Key, Woodruff #9	49 421370	Anti Rotation Bracket
23 04050-09	Retaining Ring, 5/8" Ext, Basic	50 04003-04	Bolt, 5/16-18 x 1" Carriage
24 48203	Belt, Transmission Drive	51 422534	Plate, Backing
25 481048	Idler Pulley, Transmission		
26 481666	Pulley, Traction Drive		
27 04063-24	Key, 1/4 x 1/4 x 2-3/4"		
28 04041-28	Flat Washer, 7/16" Special		
29 04030-05	Lock Washer, 7/16"		

** = Requires welding onto chassis.

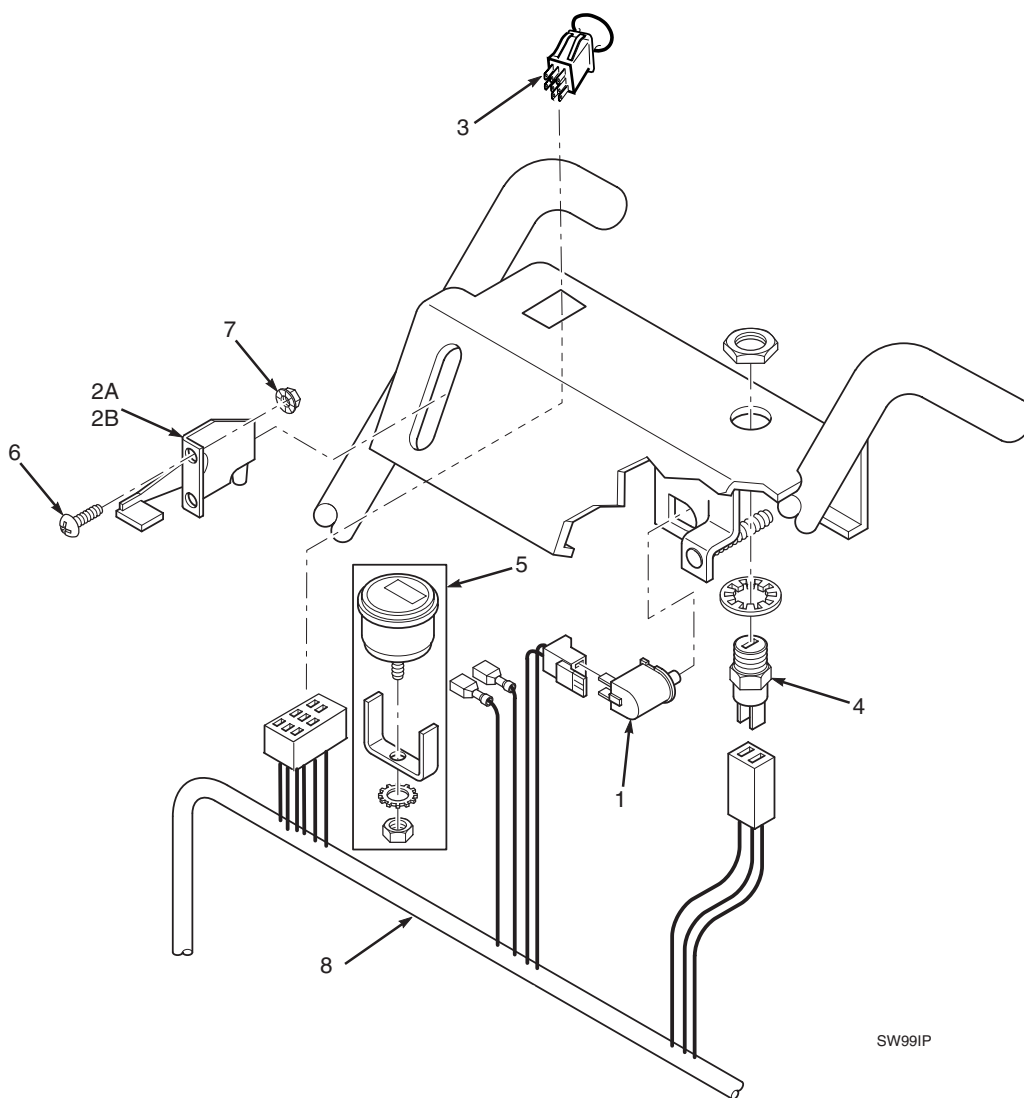
HANDLE ASSEMBLY



HANDLE ASSEMBLY

Ref. No.	Part No.	Description	13KH 18KH 13KA 15KA				Ref. No.	Part No.	Description	13KH 18KH 13KA 15KA			
			15KH	17KA						15KH	17KA		
1	461597	Handle Assembly	x	x	x	x	57	04001-17	Bolt, 5/16-18 x 2" Hex Head	x	x	x	x
2	421360	Belt Guard	x	x	x	x	58	04019-02	Nut, 1/4-20 Serrated Flange	x	x	x	x
3	04017-27	Capscrew, 3/8-16 x 1" Ser. Flange	x	x	x	x	59	04040-15	Flatwasher, 5/16 (.375 x .875 x .083)	x	x	x	x
4	04041-07	Washer, 3/8" (.391 x .938 x .105)	x	x	x	x	60	04021-02	Nut, 1/4-20 Elastic Stop	x	x	x	x
5	04021-09	Nut, 3/8-16 Elastic Stop	x	x	x	x	61	48179-01	Fuel Hose 7/32 ID x 3.5"(KA. Only)			x	
6	48755	Spring, Idler	x	x	x	x	62	48059-02	Fuel Hose Clamp (KA. Only)			x	
7	04001-10	Bolt, 5/16-18 x 1-1/4" Hex Head	x	x	x	x	63	48057-02	Fuel Filter (KA. Only)			x	
8	04021-10	Nut, 5/16-18 Elastic Stop	x	x	x	x	64	48058	Fuel Hose, 1/4"ID, 10" (KH Only)	x	x		
9	04017-05	Capscrew, 1/4-20 x 3/4" Hex Head	x	x	x	x	64A	48058	Fuel Hose, 1/4"ID, 20" (KA. Only)			x	x
10	44140	Control Rod, Steering	x	x	x	x	65	48059-01	Clamp, Fuel Hose	x	x	x	x
11	04062-02	Hair Pin, Small	x	x	x	x	66	481072	Choke Control				x
12	04001-23	Bolt, 3/8-16 x 4-1/2" Hex Head	x	x	x	x	67	48159	Grip, Handle	x	x	x	x
13	43032	Swivel Joint	x	x	x	x	68	48308	Valve, Fuel Shut Off	x	x	x	x
14	04062-01	Hair Pin, Large .094 Diameter	x	x	x	x	69	46846	Fuel Tank Assy.(Incl. Bush. & Val.)	x	x	x	x
15	45847	Idler Bracket, RH	x	x	x	x	70	481603	Fuel Tank Cap	x	x	x	x
15A	45846	Idler Bracket, LH	x	x	x	x	71	421239	Strap, Fuel Tank	x	x	x	x
16	43092	Idler Sleeve	x	x	x	x	72	04010-10	Screw, 1/4-20 x 2" Rnd Hd Slotted	x	x	x	x
17	04001-62	Bolt, 3/8-16 x 3/4" Hex Head	x	x	x	x	73	422279	Shift Lever	x	x	x	x
18	04004-17	Support Belt Guard	x	x	x	x	74	461163	Shift Lever Extention (incl. 80)	x	x	x	x
19	04019-04	Nut, 3/8-16 Serrated Flange	x	x	x	x	75	48144	Grip, Steering Lever	x	x	x	x
20	04019-03	Nut, 5/16-18 Serrated Flange	x	x	x	x	76	04041-07	Washer, 3/8 (.391x .938 x .105)	x	x	x	x
21	04017-28	Cpscrew, 3/16-18 x 1-1/4" Ser. Flng.	x	x	x	x	77	04020-14	Nut, 3/8-24 UNF	x	x	x	x
22	43286	Spacer	x	x	x	x	78	48028-05	Cable Tie	x	x	x	x
23	48309	Bushing	x	x	x	x	79	04001-53	Bolt, 5/16-18 x 2-1/2"	x	x	x	x
24	48292	Rubber Pad, (Upper)	x	x	x	x	80	481839	Grip, Shift Handle	x	x	x	x
25	46089	Steering Lever	x	x	x	x	81	421622	Bracket, Choke Mt. (15KA & 17KA.)				x
26	04017-17	Capscrew, 5/16-18 x 1" Ser. Flng.	x	x	x	x	82	04017-16	Capscrew, 5/16-18 x 3/4" Ser. Flange	x	x	x	x
27	48312	Bushing	x	x	x	x							
28	04040-15	Washer, 5/16 (.375 x .875 x .083)	x	x	x	x							
29	48951	Spring, Operator Presence	x	x	x	x							
30	45573	Operator Presence Lever,	x	x	x	x							
31	45572	Operator Presence Lever, RH	x	x	x	x							
32	44005	Brake Rod	x	x	x	x							
33	45092	Brake Lever	x	x	x	x							
34	45093	Brake Link	x	x	x	x							
35	42254	Brake Link Plate	x	x	x	x							
36	04024-01	Nut, 3/8 Push-on	x	x	x	x							
37	48114-05	Grease Fitting, Straight 1/4-28	x	x	x	x							
38	04050-01	Retaining Ring, 5/8 Ext. "E"	x	x	x	x							
39	48210	Brake Band	x	x	x	x							
40	04001-45	Bolt, 3/8-16 x 2" Hex Head	x	x	x	x							
41	04031-08	1/4" Internal Tooth Lockwasher	x	x	x	x							
42	04032-01	Curved Spring Washer	x	x	x	x							
43	04015-13	Socket Head Capscrew #8-32 x 1/2"	x	x	x	x							
44	04020-02	Nut, 1/4-20 Hex	x	x	x	x							
45	461242	Neutral Latch, RH	x	x	x	x							
45A	461241	Neutral Latch, LH	x	x	x	x							
46	48205	Rubber Pad (Lower)	x	x	x	x							
47	48202A	Belt, Wheel Drive	x	x	x	x							
48	48198	Idler Pulley, Wheel Drive	x	x	x	x							
49	48199	Pulley, Jackshaft (Inc. 50)	x	x	x	x							
50	04012-04	Setscrew, Hex Socket Knurl	x	x	x	x							
		Cup Pt. 5/16-18 (nylock)											
51	43098	Spacer, Jackshaft Pulley	x	x	x	x							
52	48223	Flange, Jackshaft Bearing	x	x	x	x							
53	48224	Bearing, Jackshaft	x	x	x	x							
54	04050-09	Retaining Ring, 5/8 Ext. Basic	x	x	x	x							
55	04017-06	Capscrew, 1/4-20 x 1" Ser. Flange	x	x	x	x							
56	48030-09	Clamp	x	x	x	x							

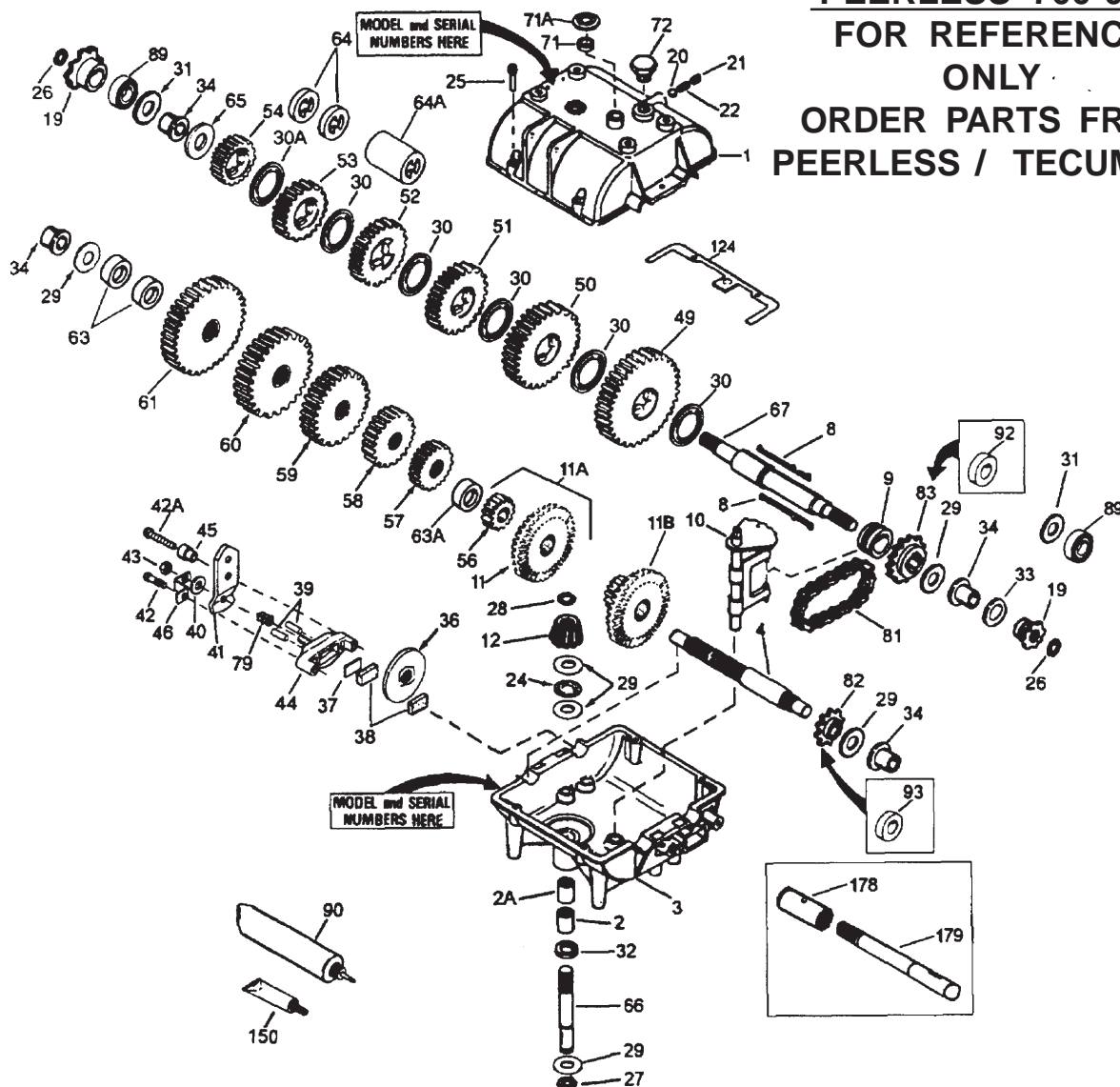
INSTRUMENT PANEL



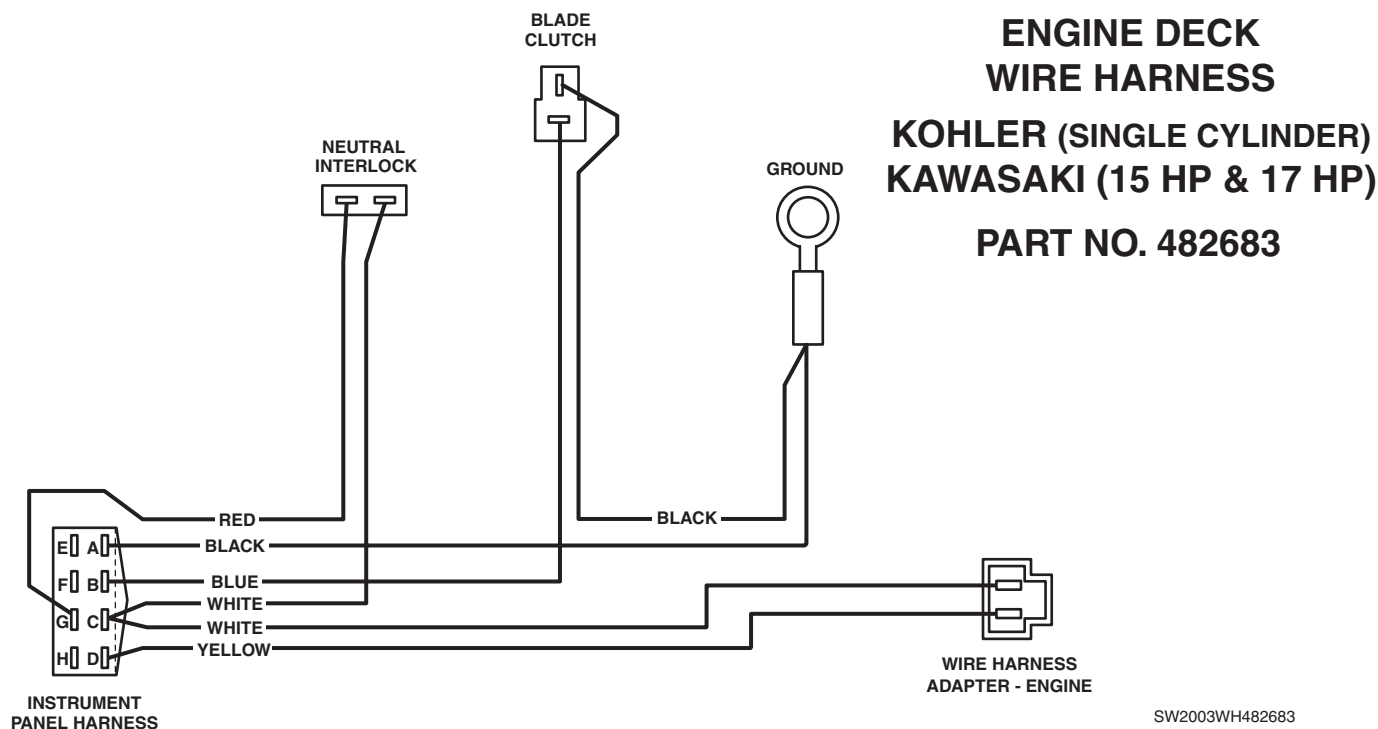
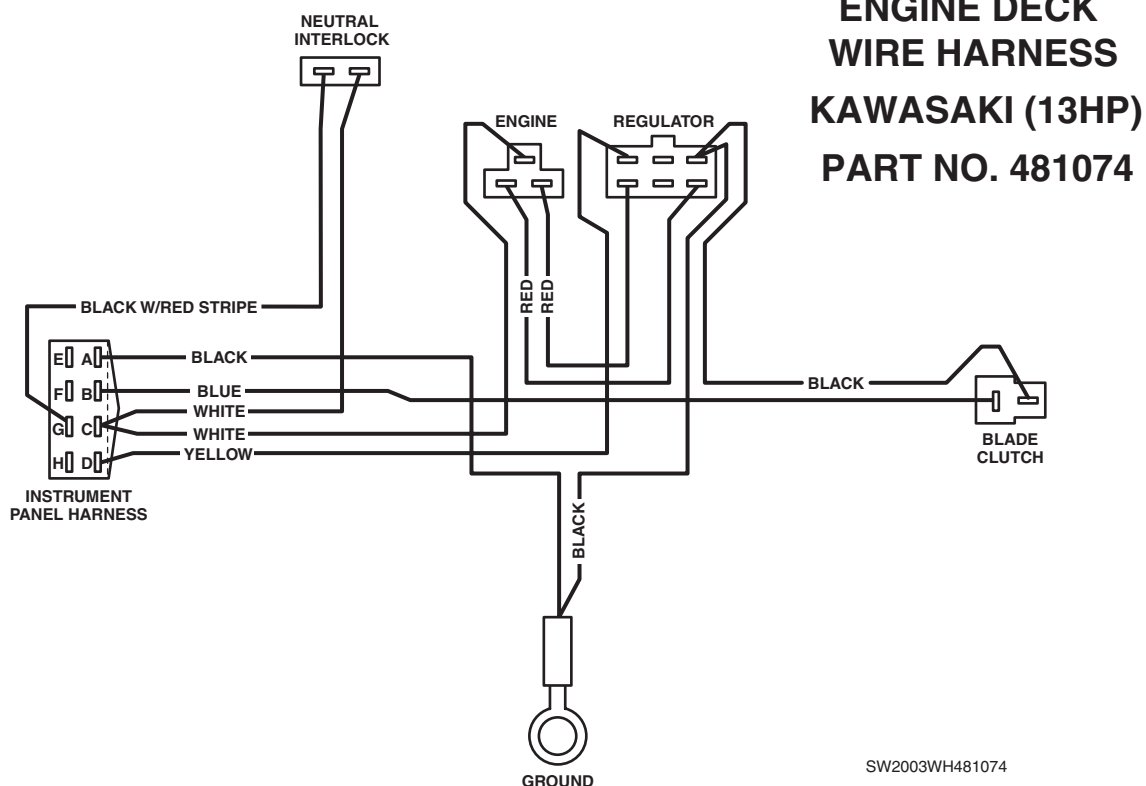
Ref. No.	Part No.	Description	13KH 15KH	18KH	13KA	15KA 17KA
1	48717	Switch, Neutral Interlock	X	X	X	X
2A	481071	Throttle Control	X	X	X	
2B	48946	Throttle Control (15KA & 17KA)				X
3	481687	Engagement Switch, Electric Clutch	X	X	X	X
4	48609	Key Switch (Includes hardware)	X	X	X	X
5	48023	Hour Meter (dealer installed)	X	X	X	X
6	*	Screw, #10-32 x .50 Phillips Washer Head	X	X	X	X
7	04019-01	Nut, #10-32 Serrated Flange Hex Head	X	X	X	X
8	482711	Handle Wire Harness, Manual Start	X	X	X	X
NS	48030-09	Clamp, Wire Harness	X	X	X	X

* Common hardware which should be purchased locally. All bolts grade 5 plated, all other fasteners zinc plated.

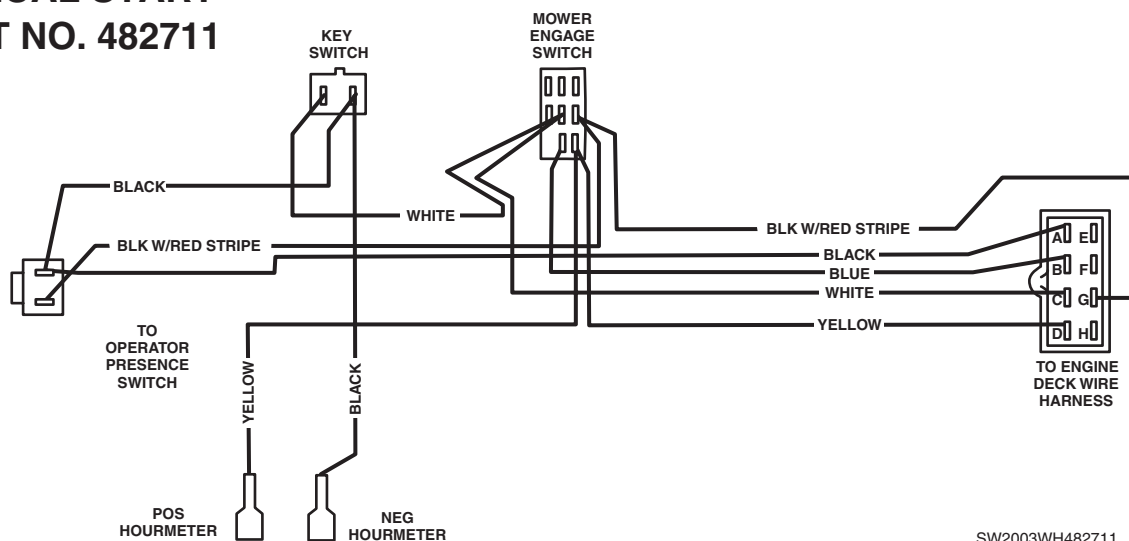
**PEERLESS 700-070
FOR REFERENCE
ONLY
ORDER PARTS FROM
PEERLESS / TECUMSEH**



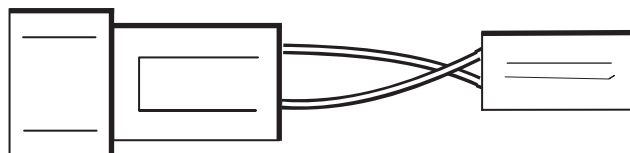
Ref. No.	Part No.	Description	REF. NO.	PART NO.	DESCRIPTION
1	772083A	Case, Transmisson	50	778125	Spur Rear (35 teeth)
2	780086A	Needle Bearing Grease Spec	51	778239A	Spur Gear (32 teeth-steel)
2A	780142	Needle Bearing	52	778124A	Spur Gear (30 teeth)
3	770061A	Case, Transmission	53	778123A	Spur Gear (25 teeth)
8	792089A	Shift Key	56	778145	Spur Gear (12 teeth-steel)
9	784266	Shift Collar	57	778151	Spur Gear (15 teeth)
10	784376	Shift Rod & Fork	58	778240	Spur Gear (18 teeth-steel)
11	778154	Bevel Gear (42 teeth)	59	778126A	Spur Gear (20 teeth)
12	778176	Bevel Pinion (14 teeth-steel)	60	778127A	Spur Gear (25 teeth)
20	792077	Steel Ball, 5/16" dia.	65	780139	Washer
21	792078	Set Screw, 3/8-16 x 3/8"	66	776135	Input Shaft (3-11/16" long)
22	792079	Spring	67	776402	Shifter & Brake Shaft
24	780071	Thrust Bearing	71	788069	Square Cut Ring
25	792073	Screw, 1/4-20 x 1-1/4" (6)	72	792074	Threaded Plug (Shipping only, not used)
27	792035	Retaining Ring	81	786081	Roller Chain (No. 41 chain, 24 links)
28	788040	Retaining Ring	82	786082	Sprocket (9 teeth)
29	780072	Washer (6)	83	786083	Sprocket (18 teeth)
30	780108	Washer (5)	90	788067B	Grease (32 oz. bottle Bentonite grease)
32	792001	"O" Ring	150	510334	Gasket Eliminator (Loctite #515)
34	780105A	Flanged Bushing	178	*	Coupling (See page 6-7 for part number)
49	778146A	Spur Gear (37 teeth)	179	*	Connector Shaft (See page 6-7 for part number)



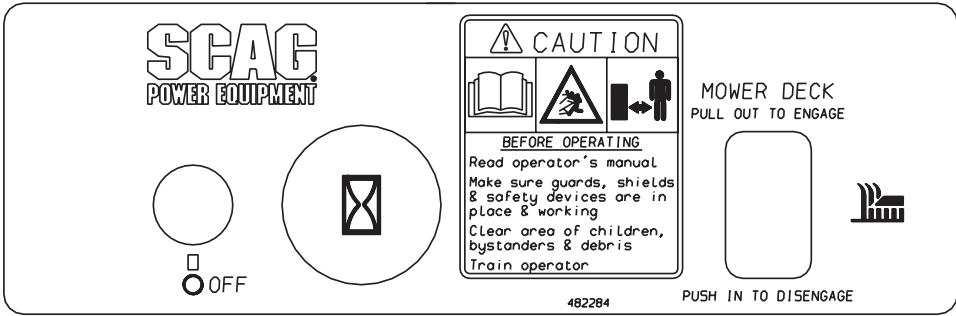
HANDLE WIRE HARNESS MANUAL START PART NO. 482711



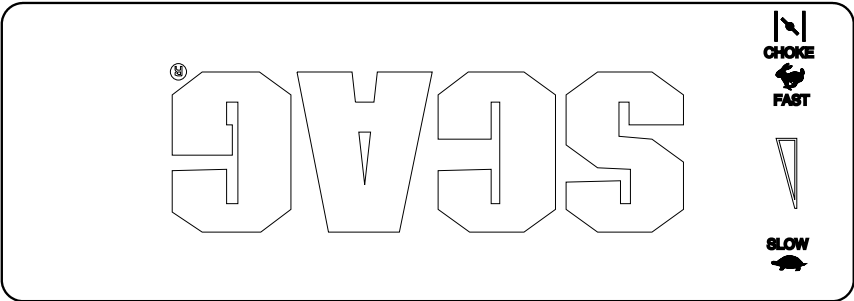
WIRE HARNESS ADAPTER KAWASAKI (15 HP & 17 HP) PART NO. 481717



SW2003WH481717



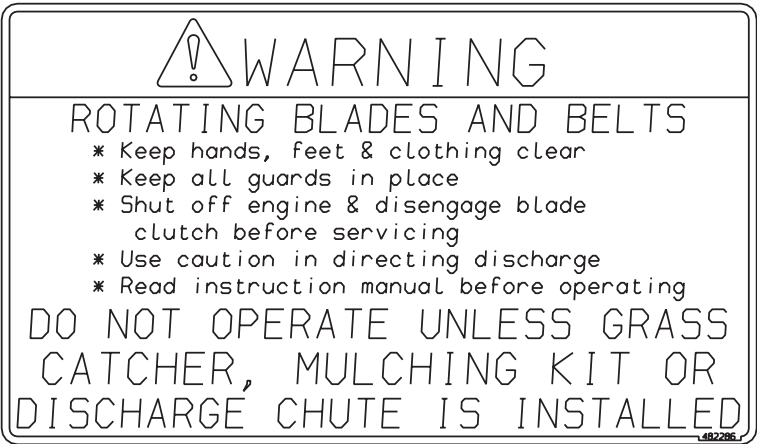
482284



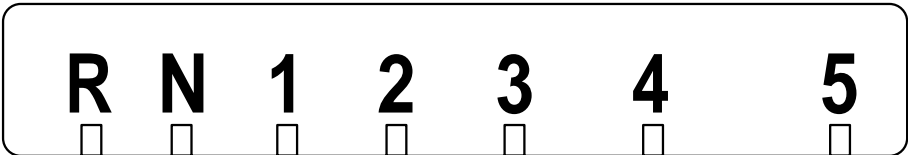
481122



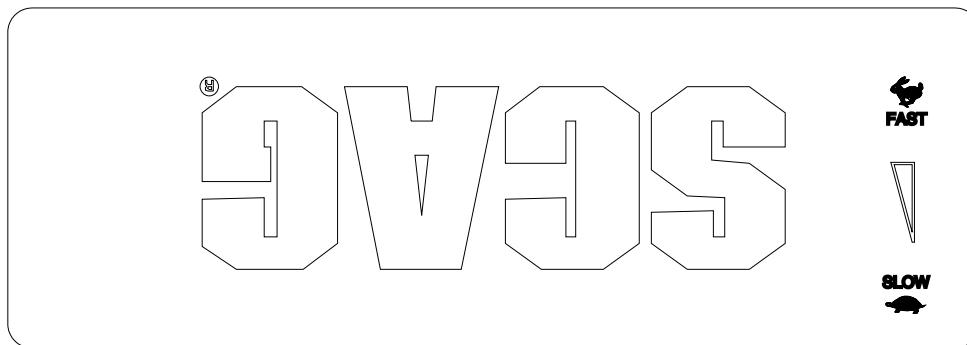
32" - 48315
36" - 482297
48" - 481953
52" - 481954



482286



48332



481483



482285



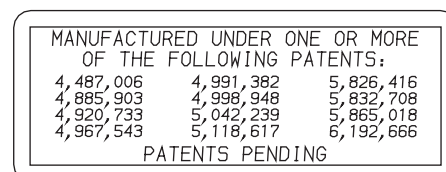
48404



481971



481039



48656



481109

LIMITED WARRANTY - COMMERCIAL EQUIPMENT

Any part of the Scag commercial mower manufactured by Scag Power Equipment and found, in the reasonable judgment of Scag, to be defective in materials or workmanship, will be repaired or replaced by an Authorized Scag Service Dealer without charge for parts and labor. This warranty is limited to the original purchaser and is not transferable. Proof of purchase will be required by the dealer to substantiate any warranty claims. All warranty work must be performed by an Authorized Scag Service Dealer.

This warranty is limited to the following specified periods from the date of the original retail purchase for defects in materials or workmanship:

- * Wear items including drive belts, blades, hydraulic hoses and tires are warranted for ninety (90) days.
- * Batteries are covered for ninety (90) days.
- * Frame and structural components including oil reservoir, fittings, and oil coolers are warranted for 2 years (Parts and labor 1st year; Parts only 2nd year).
- * Cutter decks are warranted against cracking for a period of three (3) years. (Parts and labor 1st year; Parts only 2nd and 3rd year) The repair or replacement of the cutter deck will be at the option of Scag Power Equipment. We reserve the right to request components for evaluation. This warranty does not cover any mower that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the Operator's Manual.
- * Engines and electric starters are covered by the engine manufacturer's warranty period.
- * Major drive system components are warranted for two (2) years by Scag Power Equipment. (Parts and labor 1st year; Parts only 2nd year) (Two year warranty exclude fittings, hoses, drive belts). The repair or replacement of the hydraulic pump or hydraulic motor will be at the option of Scag Power Equipment. This warranty does not cover any mower that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the Operator's Manual.
- * Electric clutches have a Limited Warranty for 2 year (Parts and labor 1st year; Parts only 2nd year).
- * Cutter Spindle Assemblies 46631 have a Limited Warranty for three years (Parts and labor 1st year; Parts only 2nd and 3rd year).
- * Any Scag product used for rental purposes is covered by a 90 day warranty.

The Scag mower, including any defective part must be returned to an Authorized Scag Service Dealer within the warranty period. The expense of delivering the mower to the dealer for warranty work and the expense of returning it to the owner after repair will be paid for by the owner. Scag's responsibility is limited to making the required repairs and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Scag mower.

This warranty does not cover any mower that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the Operator's Manual. The warranty does not apply to any damage to the mower that is the result of improper maintenance, or to any mower or parts that have not been assembled or installed as specified in the Operator's Manual and Assembly Manual. The warranty does not cover any mower that has been altered or modified, changing performance or durability. In addition, the warranty does not extend to repairs made necessary by normal wear, or by the use of parts or accessories which, in the reasonable judgment of Scag, are either incompatible with the Scag mower or adversely affect its operation, performance or durability.

Scag Power Equipment reserves the right to change or improve the design of any mower without assuming any obligation to modify any mower previously manufactured. All other implied warranties are limited in duration to the two (2) year warranty period or ninety (90) days for mowers used for rental purpose. Accordingly, any such implied warranties including merchantability, fitness for a particular purpose, or otherwise, are disclaimed in their entirety after the expiration of the appropriate two year or ninety day warranty period. Scag's obligation under this warranty is strictly and exclusively limited to the repair or replacement of defective parts and Scag does not assume or authorize anyone to assume for them any other obligation. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Scag assumes no responsibility for incidental, consequential or other damages including, but not limited to, expense for gasoline, expense of delivering the mower to an Authorized Scag Service Dealer and expense of returning it to the owner, mechanic's travel time, telephone or telegram charges, rental of a like product during the time warranty repairs are being performed, travel, loss or damage to personal property, loss of revenue, loss of use of the mower, loss of time or inconvenience. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

